

# Distribution and discovery of northern California bryophytes





Bryophytes represent three of the four successful lineages of extant land plants that have evolved a set of solutions of living on land significantly different from (not inferior to) vascular plants

Bryophytes simply differ from vascular plants in just about every way imaginable. They should not be viewed as 'primitive' or 'lower plants'

Bryophytes have been around for over 500 million years, and therefore, are highly successful



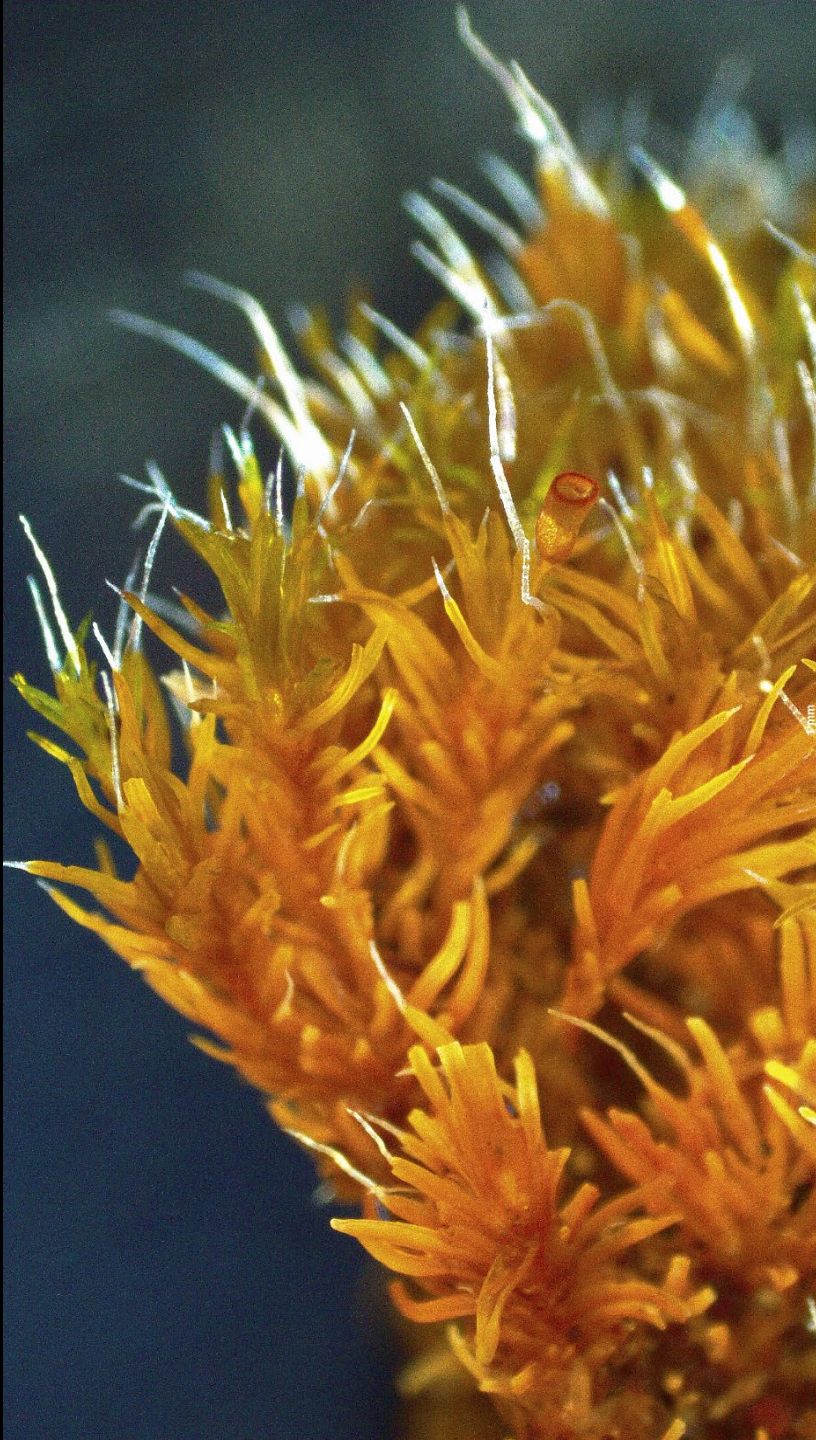




*Philonotis breutelioides* Shevock & Agüero  
published in Madroño, 2023







*Grimmia insolita*  
J. Muñoz, I. Solano &  
D. Quandt

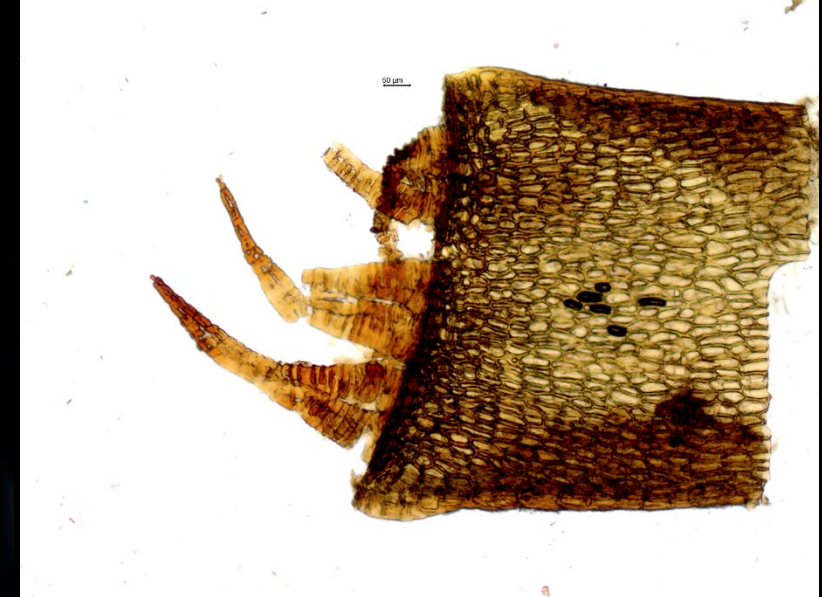
published in Journal  
of Bryology, 2023

Two occurrences;  
Russian Wilderness,  
Siskiyou County



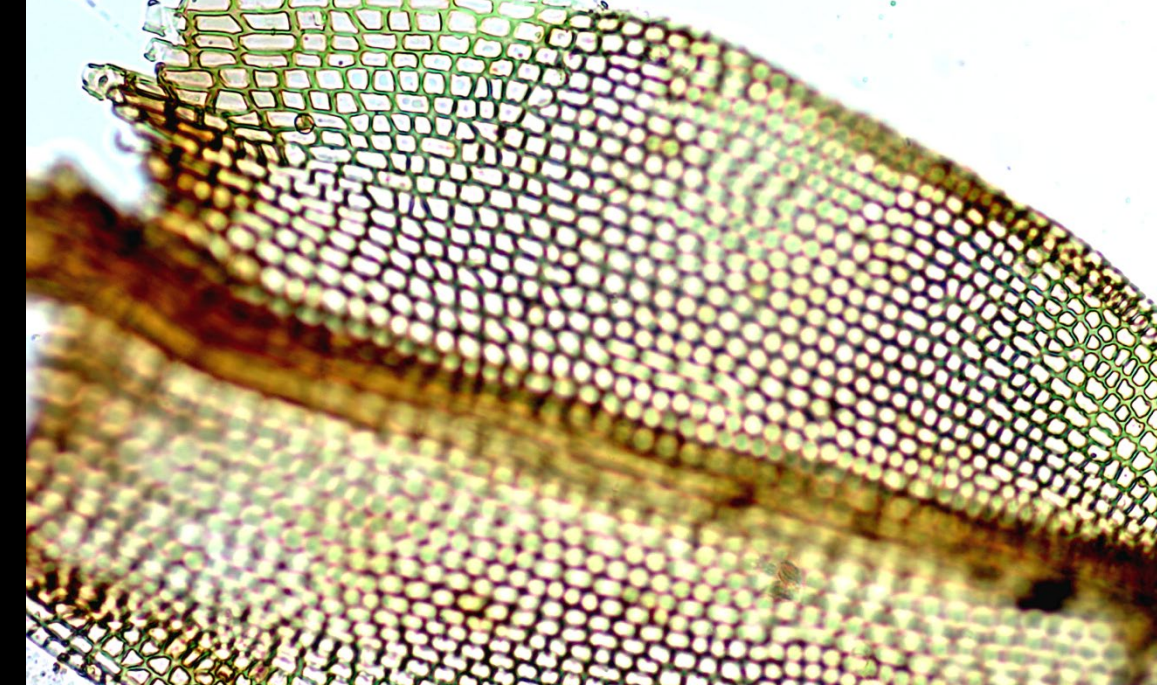
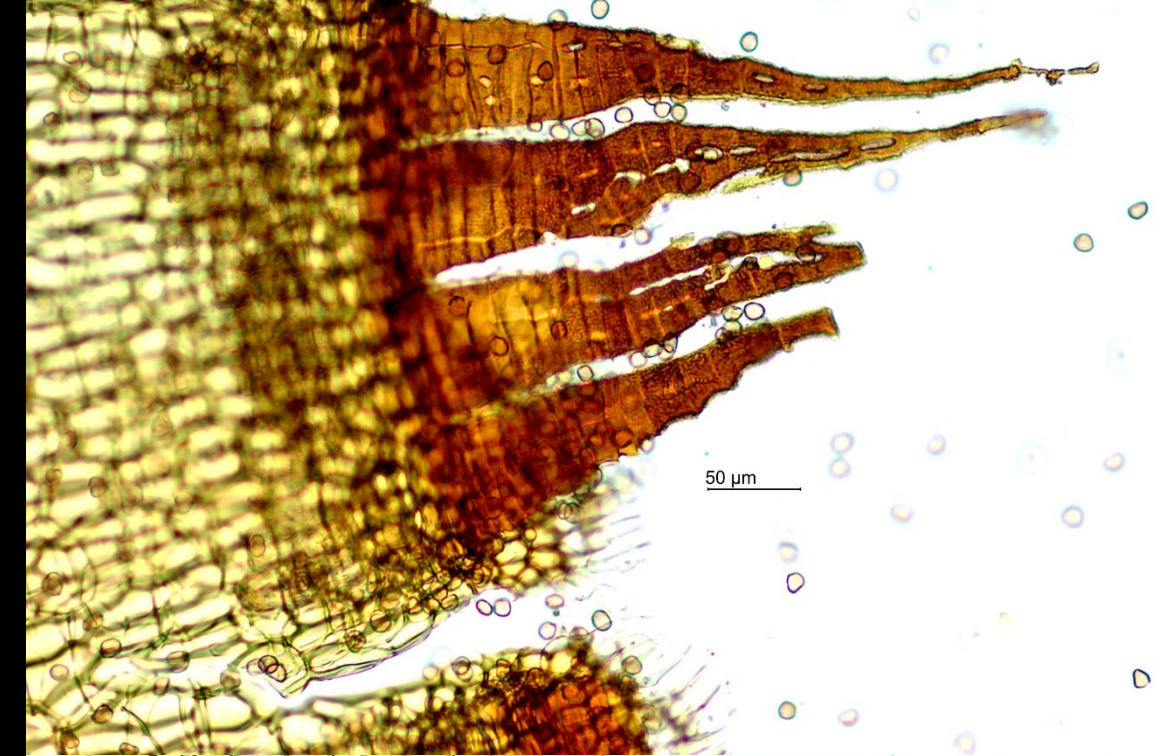


*Grimmia shevockii* J.Muñoz, I.Solano & D.Quandt  
published in Journal of Bryology, 2023



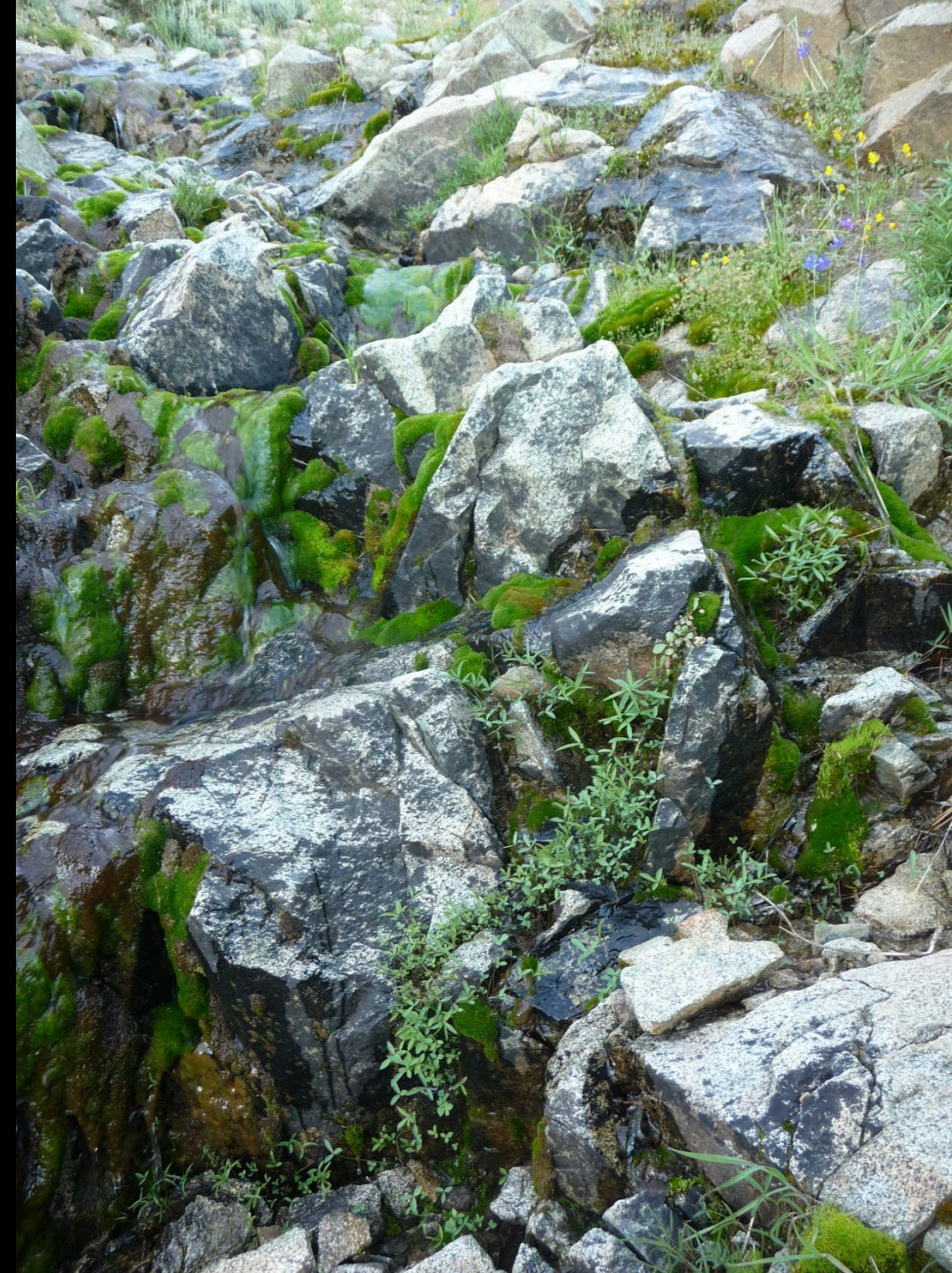


*Grimmia* sp. nov. ??  
So far, only known from one locality  
in Tehama County





*Ptychostomum* sp. nov.  
(a manuscript is now in prep.)









*Syntrichia lithophila* Dusén

Recently discovered as new to North America (first from SE Oregon) and now one occurrence on the Modoc NF, Modoc County





## New California Bryophyte Additions (from the Marble Mtn. Wilderness)

*Asterella lindenbergiana*, southern range extension from the Cascades of Oregon

*Haplodontium* cf. *himalayanum*, a really amazing disjunct from the Himalayas but need either mature sporophytes or a DNA confirmation. It could also possibly be undescribed.

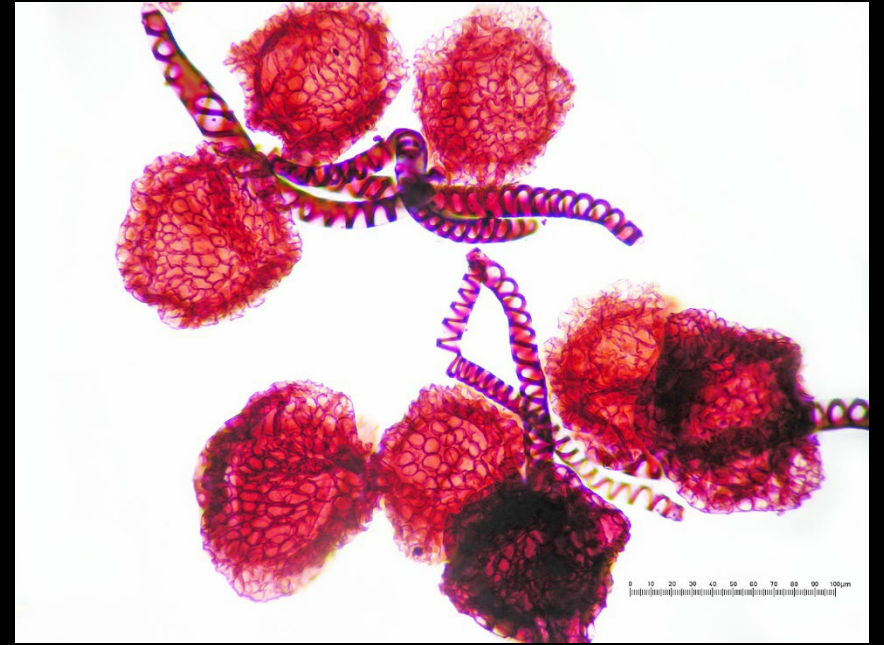
*Plagiobryum zieri*, southern range extension from the Cascades of Oregon

*Plagiopus oederianus*, southern range extension from the Cascades of Oregon

*Ptychostomum intermedium*, southern extension from British Columbia

*Stereodon hamulosus*, nearest occurrences are in Alaska, Colorado





*Asterella  
lindenbergiana*





*Pseudoleskeella serpentinensis*

Since 2004, 104 mosses have been added as new additions to the California flora, and of these, 32 were described as new to science. There are many more yet to discover!

These will not be 'recent introductions', but rather, relictual taxa that have remained since previous climate changes





So where are new bryophytes to be found in California?

**High priorities:**

- Ice-Age refugia areas
- Unique microhabitats
- Areas with complex geology
- Wilderness areas
- Watersheds







Photographs kindly provided by:

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