

Conservation Status Assessment

Scientific Name: *Phaeocollybia californica*

Classification: Fungus

Assessment area: Global

Heritage Rank: **G3**

Rank Date: 12/13/2016

Rank Reasons: Occurrences of *P. californica* are higher than previously reported due to the recent synonymization of *P. rufotubulina* with PHCA based on ITS & RPB2 sequence analyses of 30 collections. App. 102 collections have been identified from about 20–25 sites in Oregon & California. Norvell & Exeter (2008) treat *californica* (pp. 63–69) and *rufotubulina* (pp. 175–180) as separate species; Norvell & al. 2010 present initial sequence data supporting *californica* & *rufotubulina* as conspecific. Final research and paper noting synonymy in preparation. Multigene sequence analyses by Matheny & al. (2006) support *Phaeocollybia* in the Hymenogastraceae (not Cortinariaceae). (Matheny PG, Curtis JM, Hofstetter V, Aime MC, Moncalvo JM, Ge ZW, Yang ZL, Slot JC, Ammirati JF, Baroni TJ, Bougher NL, Hughes KW, Lodge DJ, Kerrigan RW, Seidl MT, Aanen DK, DeNitis M, Daniel GM, Desjardin DE, Kropp BR, Norvell LL, Parker A, Vellinga EC, Vilgalys R, Hibbett DS. 2006. Major clades of Agaricales: a multilocus phylogenetic overview. *Mycologia* 98: 982-995. ; Norvell, Lorelei L.; Exeter, Ronald L.; Gordon, Matthew; Redhead. 2010. Species concepts in a molecular age: the *Phaeocollybia waltz*. Abstract in IMC9: The biology of fungi; Oxford abstract on disc given to 1750 IMC9 delegates. [poster available online via Lorelei Norvell—Research Gate] ; Norvell, Lorelei L.; Exeter, Ronald L. 2009 (“2008”). *Phaeocollybia* of Pacific Northwest North America. USDI-BLM/OR/WA/GI-08/100-1792, Salem, Oregon 228 p. *Phaeocollybia* [available online via Lorelei Norvell—Research Gate])

Range Extent: FH = 20,000 to >2,500,000 sq km (~8000 to >1,000,000 sq miles)

Comments: There are sites of this species in the Coast, Cascade, and Siskiyou Mountains of Oregon, and the Coastal mountains of Del Norte, Humboldt, and Mendocino Counties of California. A record from Washington's Olympic Peninsula was determined by L. Norvell to be the species *Phaeocollybia scatesiae* and not *P. californica*. There are also two collections from Veracruz, Mexico. The range in the United States is 75,236 sq. km. Including the Mexican sites increases the range to 1.3 million sq. km.

Population Size: Not assessed

Comments: None

Number of Occurrences: D = 81 - 300

Comments: There are about 86 known sites of this species.

Area of Occupancy: E = 26-125 4-km² grid cells

Comments: This species occupies about 106 grid squares across its global range.

Good Viability: C = Few (4-12) occurrences with excellent or good viability or ecological integrity

Comments: Five occurrences are in State or national parks, wilderness areas, national scenic areas, or national monuments.

Environmental Sensitivity: B = Narrow. Specialist or community with key requirements common

Comments: A mycorrhizal species found in forests with Quercus or Lithocarpus spp.

Short Term Trends: Not Evaluated

Comments: None

Long Term Trends: Not Evaluated

Comments: None

Threat Impact: C = Medium

Comments:
More than 90% of sites are not in permanently protected areas. If those sites are logged on a 40 year rotation, around 22% of sites would be impacted over 10 years, and around 90% would be impacted over 100 years. This species is mycorrhizal on oaks and tan oaks. Those species are vulnerable to the invasive parasite, Phytophthora ramorum.

Intrinsic Vulnerability: Not Evaluated

Comments: None

Calculated Rank: G3

Rank Author: Michael Russell

Rank Reviewer: Michael Russell

References:
No additional references listed.

Definitions and Resources:

Rank Prefixes	
G	Global rank, applied to taxon's full geographic range
S	State rank, applied to taxon's range within the designated state
Rank Values	
1	Critically imperiled
2	Imperiled
3	Vulnerable
4	Apparently secure, uncommon but not rare
5	Secure, common, abundant, and widespread

Suggested citation:
Oregon Biodiversity Information Center. 2017. Fungi Conservation Status Assessments. Institute for Natural Resources, Portland State University and Oregon State University. Portland, Oregon and Corvallis, Oregon.

More assessments available at <http://inr.oregonstate.edu/orbic/rare-species/ranking-documentation>

Element rank calculator resources at <http://www.natureserve.org/conservation-tools/conservation-rank-calculator>

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