

Conservation Status Assessment

Scientific Name: *Phaeocollybia olivacea*

Classification: Fungus

Assessment area: Global

Heritage Rank: **G3Q**

Rank Date: 3/9/2017

Assigned Rank Comments: None.

Rank Adjustment Notes: RPB2 & ITS sequence analyses of 39 PHOL collections reveal a complex in need of additional sampling and morphological research; this complex comprises at least three distinct taxa, potentially separable based on host associations, and a close association with PHGR. At least 273 collections were identified from >68 sites in California (16) Oregon (>52) & WA (1) from 1956–2014. See Norvell & Exeter (2008: 119–224) for full treatment and references and Norvell & al. (2010) for partial molecular data. Found no data to contradict 2017 assigned global ranking. 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: G = 200,000-2,500,000 sq km (~80,000-1,000,000 sq mi)

Comments: The range of this species is 407,700 sq. km. It includes two sites in the Olympic peninsula, One site in the Idaho panhandle, numerous sites in the Oregon Cascade, coast, and Siskiyou mountains, many sites in the California coast ranges from Del Norte to Santa Cruz Counties, and one site at Castle Crags in the eastern Klamath Mountains.

Population Size: Not assessed

Comments: None

Number of Occurrences: D = 81 - 300

Comments: There are 127 known sites of this species

Area of Occupancy: F = 126-500 4-km² grid cells

Comments: This species occupies 187 grid squares.

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

Comments: About eleven sites are in National or State parks or wilderness areas.

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

Comments: A mycorrhizal species of low elevation forests with conifers and Fagaceae trees.

Short Term Trends: Not Evaluated

Comments: None

Long Term Trends: Not Evaluated

Comments: None

Threat Impact: C = Medium

Comments:

Fewer than 10% of sites are in protected areas. If the unprotected sites are logged on a 40 year rotation, around 25% of the sites would be impacted over 10 years, and around 90% of sites would be impacted over 100 years.

Intrinsic Vulnerability: Not Evaluated

Comments: None

Calculated Rank: G3

Rank Author: Michael Russell

Rank Reviewer: Lorelei Norvell

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>

Oregon Biodiversity Information Center, Institute for Natural Resources
Oregon State University and Portland State University

Mail Stop: INR, P.O. Box 751

Portland, OR 97207-0751 <http://inr.oregonstate.edu/orbic>

(503)-725-9950

<http://inr.oregonstate.edu/>