

## Conservation Status Assessment

**Scientific Name:** *Phaeocollybia spadicea*

**Classification:** Fungus

**Assessment area:** Global

**Heritage Rank:** **G3G4**

**Rank Date:** 3/9/2017

Assigned Rank Comments: None.

Rank Adjustment Notes: RPB2 & ITS sequence analyses of 63 collections support a more or less unified species concept, with some inner clades detected with no ambiguities. Included within the tested isolates are a large number of representatives of *P. tibiikauffmanii* Norvell 2004, now regarded as a synonym. This greatly increases the number of collections made in 1935–2015 to at least 365 from over 64 known sites in California (7), Oregon (>51) & WA (6). See Norvell & Exeter (2008: 193–204, which includes treatment of *P. tibiikauffmanii*) for full treatment & references and Norvell & al. (2010) for molecular data. The 2017 assigned global ranking could be lowered to G4 in Region 6. 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:** F = 20,000-200,000 sq km (~8,000-80,000 sq mi)

Comments: The range is 135,342 sq. km. There are sites in the western Olympic Peninsula of Washington, the Coast, west Cascades, and Siskiyou Mountains of Oregon. In California there are sites along the west slope of the Coastal Mountains in Del Norte, Humboldt, Trinity, Mendocino, and Marin Counties. There is also a record located along I-5 in northern Shasta County. In the 2002 ranking, L. Norvell mentioned a site in the Forest Service Database that was east of the Cascades crest that she disregarded because she could not identify a collection it was associated with. The Shasta County collection is west of the Cascades Crest, but east of the Coastal Mountains crest. That location seems to be the one that was disregarded before, despite the differences in the geographical description. Excluding that site reduces the range to 128,228 sq. km. IN the 2002 ranking L. Norvell mentions a site in Santa Cruz county. I wasn't able to find records of the Santa Cruz population, but including it would add about 9,000 sq. km to the total range.

**Population Size:** Not assessed

Comments: None

**Number of Occurrences:** D = 81 - 300

Comments: There are about 85 known occurrences across its range.

**Area of Occupancy:** E = 26-125 4-km<sup>2</sup> grid cells

Comments: This species occupies about 120 grid squares across its range.

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

Comments: There are 11 known occurrences in State or National Parks, the questionable collection in Shasta County California is also in a State Park.

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

Comments: *P. spadicea* is restricted to very moist mesic late successional and old growth coniferous forests. It is associated with coastal or low-lying closed-canopy stands containing *Tsuga heterophylla*, *Picea sitchensis*, *Pseudotsuga menziesii*) and rarely in mixed deciduous/coniferous (*Pinus*, *Pseudotsuga*, *Lithocarpus*, *Quercus*) forests, (Norvell. 1998a. The biology and taxonomy of Pacific Northwest species of *Phaeocollybia* Heim. 391 pp. ALSO Norvell. 1998b. . Observations on the development, morphology, and biology of *Phaeocollybia*. Mycological Research 102:615-630.)

**Short Term Trends:** Not Evaluated

Comments: None

**Long Term Trends:** Not Evaluated

Comments: None

**Threat Impact:** C = Medium

Comments:  
Approximately 88% 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 88% 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:**

<b>Rank Prefixes</b>	
G	Global rank, applied to taxon's full geographic range
S	State rank, applied to taxon's range within the designated state
<b>Rank Values</b>	
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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