Conservation Status Assessment

Scientific Name: ***Dendrocollybia racemosa***
Classification: Fungus
Assessment area: Global

Heritage Rank: **G3G4**
Rank Date: 3/9/2017

Rank Reasons: Species has a wide range, and a fair number of new occurrences since the last assessment. An unknown ranking for threats yields a G3 ranking, however, a medium threat level, which the threat may be, yields a G4, therefore the species is ranked as a G3G4. L. Norvell says "NOT a collybia: REFER to Dendrocollybia racemosa (Pers.) R.H. Petersen & Redhead (Hughes & al.(2001: 169). Cited as critically endangered in Lorraine (Larent-Dargent 2009). Candidate for listing on 2014 European red-list where now cited as threatened, vulnerable, or (critically) endangered in Denmark Flanders, Germany (very rare), and Poland; not threatened in Finland, Great Britain, Norway, Romania. No new data found to contradict 2017 assigned Region 6 rank." (Laurent-Dargent, Jonathan. 2009. La Liste Rouge des Champignons (macromycètes) rares ou menacés de Lorraine. Thesis for Docteur de Pharmacie: Universite Henry Poincare - Nancy I. 120 pp.)

Range Extent:
H = >2,500,000 sq km (> 1,000,000 sq mi)

Comments: Found across North America in the US and Canada. There may also be an occurrence in Portugal and Czech Republic.

Population Size:
Not assessed

Comments: None

Number of Occurrences:
D = 81 - 300

Comments: Around 115 occurrences. A fair number of new occurrences since the 2002 assessment.

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

Comments: Low end of this range. Around 115 occurrences, some of which occupy a few grid cells.

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

Comments: Around 11 occurrences in protected areas including: Olympic National Park, Alpine Lakes Wilderness, Mount Rainier National Park, Jedediah Smith Redwoods State Park, Redwood National and State Parks, Glacier Bay National Park.

Environmental Sensitivity:
Not Evaluated

Comments: None

Short Term Trends:
Not Evaluated

Comments: None

Long Term Trends:

Not Evaluated

Comments: None

Threat Impact:

U = Unknown

Comments:
From Norvell 2002: "Collection data are sparse and occurrences too spotty and rare to predict what threats will imperil CORA16. Occurrences are dictated by the presence of the intended host (mushrooms of unknown identity) within forested areas. Presumably whatever threatens the intended host, general habitat, microclimates, and/or host's substrate or symbiotic partner will likewise imperil CORA16. Other threats include incidental catastrophic events (wildfires), road construction, development, and heavy logging activities (Norvell pers. comm. 2002). CORA16 is mycoparasitic and fruits after rapidly digesting its mushroom hosts; it also forms protective sclerotia that are assumed to enable it to lie dormant for long periods. Presumably CORA16 is vulnerable to removal of the host mushroom and substrate prior to fruiting or sclerotia formation, to removal or destruction of the sclerotia within the litter and mushroom residue, and to destruction of the habitat that fosters growth of the intended host. It is also presumably vulnerable to alteration of microhabitats and microclimate regimes (stream diversion, road construction, development), incidental catastrophic events, and logging activities that would displace the protective sclerotia and/or host mushroom population."

Intrinsic Vulnerability:

Not Evaluated

Comments: None

Calculated Rank: G3

Rank Author: Caitlin Lawrence
Rank Reviewer: Lorelei Norvell

References:

Norvell, Lorelei L. 2002. Heritage rank status factors. Assessment for Survey and Manage Project, on-line: http://orbic.pdx.edu/documents/survey/collybia_racemosa_global.pdf

Hughes, Karen W.; Petersen, Ronald H.; Johnson, James E.; Moncalvo, Jean-Marc; Vilgalys, Rytas; Redhead, Scott A.; Thomas, Tiffany; McGhee, Laura L. 2001. Infragenic phylogeny of Collybia s. str. based on sequences of ribosomal ITS and LSU regions. Mycology Research 105(2): 164-172.

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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