

Conservation Status Assessment

Scientific Name: *Rhizopogon alexsmithii*

Classification: Fungus

Assessment area: Global

Heritage Rank: **G2**

Rank Date: 3/9/2017

Assigned Rank Reasons: A relatively small number of occurrences, and a few in protected areas.

Range Extent: F = 20,000-200,000 sq km (~8,000-80,000 sq mi)

Comments: Only 2 occurrences outside the Pacific Northwest extend this range significantly to about 120,000 sq. km. Perhaps they are unconfirmed (?) since they are from 1989 but appear not to have been used in the 2002 assessment. Using either this or the larger range extent (G category) result in the same rank. PNW range is about 38,000 sq. km. Narrow band from southern BC to 1 occurrence in California.

Population Size: Not assessed

Comments: None

Number of Occurrences: B = 6 - 20

Comments: In 2002 Camacho reports "This fungus is only known from 7 sites and 7 collections from 1970 to 1986. This species is endemic to the Pacific Northwest. Only found in the Cascade Mountains. It has been found a few times in Oregon where there is the highest concentration of truffle hunters. Possibly more common in Washington if better looked for. This is a rare fungus." There are now a few more collections from Mt. Hood National Forest. Around 13 occurrences.

Area of Occupancy: D = 6-25 4-km² grid cells

Comments: Around 13 occurrences, some have inexact location so cover more than one grid cell.

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

Comments: occurrences in Mt. Rainier National Park, Mt. Jefferson Wilderness area, Three Sisters Wilderness. Around 4 protected occurrences.

Environmental Sensitivity: Not Evaluated

Comments: None

Short Term Trends: Not Evaluated

Comments: None

Long Term Trends: Not Evaluated

Comments: None

Threat Impact: C = Medium

Comments:

In 2002 Camacho noted: "This is a mycorrhizal species it is dependent on a host tree for its carbohydrates. Studies have shown that if the tree is killed the mycorrhizal fungi die shortly after. The one possibly saving feature of this species is the spore bank. However, nothing is known about the spore bank of this species."

Intrinsic Vulnerability: Not Evaluated

Comments: None

Calculated Rank: G3

Rank Author: Caitlin Lawrence

Rank Reviewer: Matt Trappe

References:

Vizzini, A.; Zotti, M.; Ryman, S.; Ghignone, S. 2010. Typification of *Octaviania rubescens* (Paxillineae, Boletales) and phylogenetic hypotheses for genus *Alpova*. *Mycologia* 102(4): 967-975.

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

(503)-725-9950

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

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