

Heritage Rank Status Factors

Elcode NFSM000001
Gname ACANTHOPHYSIUM FARLOWII

Gcomname

Number of Occurrences

C = 21 - 80
D = 81 - 300

Comments Widespread and endemic to North America. Has been recorded from 8 states and 4 provinces. Known from 3 sites in the northern spotted owl region in Oregon (1) and Washington (4). [ISMS 2002, Castellano 1999, Norvell 1995 and databases from NYBG, BPI, DAVFP, PACMA]

Number of Occurrences with Good Viability

D = Some (13-40) occurrences with good viability
E = Many (41-125) occurrences with good viability

Comments Despite the wide distribution range, very few collections have been reported; around (but probably over) 80 collections have been made since 1870. In the PNW spotted owl region, only 4 sites known, only two of which have produced collections since 1998 [Castellano et al. 1999; ISMS 2002 database].

Population Size

U = Unknown

Comments

Range Extent

G = 200,000-2,500,000 km² (about 80,000-1,000,000 square miles)
H = > 2,500,000 km² (greater than 1,000,000 square miles)

Comments Known only from northeastern (Ontario, Quebec, New Brunswick, Maine, New Hampshire, New York, Pennsylvania, Vermont) and Pacific Northwest (British Columbia, Idaho, Washington, Oregon) North America

Area of Occupancy

U = Unknown

LU = Unknown

Comments Distribution appears to be patchy, bicoastal, and dependent upon the presence of host conifers (Abies, Pseudotsuga, Tsuga) and other unknown factors.

Long-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

C = Substantial Decline (decline of 50-75%)
D = Moderate Decline (decline of 25-50%)
E = Relatively Stable ($\pm 25\%$ change)

Comments The fate of the fungus is tied to the presence of its host Abies/ Pseudotsuga/ Tsuga at the

collection site

Short-term Trend in Population Size, Extent of Occurrence, Area of Occupancy, and/or Number or Condition of Occurrences

C = Rapidly Declining. Decline of 30-50% in population, range, area occupied, and/or number or condition of occurrences

D = Declining. Decline of 10-30% in population, range, area occupied, and/or number or condition of occurrences

E = Stable. Population, range, area occupied, and/or number or condition of occurrences unchanged or remaining within $\pm 10\%$ fluctuation

Comments The fate of the fungus is tied to the presence of its host *Abies/Pseudotsuga/Tsuga* at the collection site

Threats

U = Unknown. The available information is not sufficient to assign degree of threat as above. (Severity, scope, and immediacy are all unknown, or mostly [two of three] unknown or not assessed [null].)

Scope Unknown **Severity** Unknown **Immediacy** Unknown

Comments Known from only 80 collections, most historical collections (1870-1946). The original areas in the northeast may well have since been developed or logged. The fate of the fungus is tied to the presence of its host *Abies/Pseudotsuga/Tsuga* at each collection site, and development, hot burns, and clean-cutting would be expected to remove the fungus. The biological requirements of the species are not known.

Number of Appropriately Protected and Managed Occurrences

A = None. No occurrences appropriately protected and managed

B = Few (1-3) occurrences appropriately protected and managed

Comments The fate of the fungus is tied to the presence of its host *Abies*, *Pseudotsuga*, or *Tsuga* at each collection site. Within the spotted owl region, only one site is provisionally protected in Washington state (LSR).

Intrinsic Vulnerability

U = Unknown

Comments The biological requirements of this fungus are not known. Occurs on recently dead twigs of live trees [*Abies* spp. *Tsuga canadensis*, and *Pseudotsuga menziesii*.]

Environmental Specificity

U = Unknown

Comments The host is restricted to recently dead twigs of live trees [*Abies*, *Pseudotsuga*, & *Tsuga*.] It is possible that this species also fruits in the forest canopy, where it would generally go undetected (Luoma, personal communication).

Other Considerations

NRANK - N3? Considered rare in western North America by all authors, but many collections recorded in the east during the 1930's. One population/ community near Lake Kachess, Washington, has been collected over a number of years since its discovery. Synonym: *Aleurodiscus farlowii*.

Edition 11/18/2002 **Edauthor** Lorelei L Norvell

Grank G3? **Grank Date** 11/18/2002

Greasons

Too much is unknown about the fungus to make an appropriate rank; it is possible that elimination of the trees through fire or logging will eliminate the fungus permanently from a site. Only 6 collections are confirmed from the northern spotted owl region. The fungus is small and inconspicuous and experts able to (or interested in) collecting and verifying it are few. It may be found in many more sites at the state.

BCD Sources

New Sources

Ginns & Lefebvre. 1993. Lignicolous corticioid fungi (Basidiomycota) of North America: systematics, distribution, and ecology. ALSO Castellano et al. 1999. Handbook to Strategy 1 Fungal species in the Northwest Forest Plan. USDA-FS PNW-Res. Stn. General technical report: PNW-GTR-476. ALSO NYBG herbarium database: http://scisun.nybg.org:8890/searchdb/owa/wwwcatalog.detail_list ALSO Penn State herbarium [<http://egghead.psu.edu/cgi-bin/pacma/search?4+Aleurodiscus+farlowii>]; Forestry Canada BC herbarium [http://www.pfc.cfs.nrcan.gc.ca/cgi-bin/herbarium/Voucher_e.pl]; National Fungus Collections [<http://nt.ars-grin.gov/fungalatabases/specimens/specimensframe.cfm>]; ALSO Norvell. 1995. ROD: Strategy 1 Fungal Species Evaluation (30 gilled and non-gilled Basidiomycete Strategy 1 species). Unpubl. report on file in the Regional Mycology Lab, Corvallis, Oregon.

Luoma, D. 2001. Monitoring of Fungal Diversity at the Siskiyou Integrated Research Site with Special Reference to the Survey and Manage Species *Arcangeliella camphorata* (Singer & Smith) Pegler & Young. Special Report on file with the Chetco Ranger District, Siskiyou National Forest, Brookings, Oregon.