

# Oregon Status Factors

**Elcode** NFSM000128  
**Gname** PHAEOLLYBIA SCATESIAE  
**Gcomname**

## Number of Occurrences

C = 21- 80

**Comments** The PHSC13 entries in the ISMS 2002 database are correct but do not include historical data, erroneously reported under PHCA40 headings. Therefore the ISMS 2002 data is added to data from Norvell (1995, 1998a, pers comm 2002). In Oregon ISMS 2002 cites 11 and Norvell 1995a 10 occurrences = 21 total confirmed occurrences.

## Number of Occurrences with Good Viability

D = Some (13-40) occurrences with good viability

**Comments** All 11 ISMS occurrences are extant and 7 of the 10 historical occurrences lie in areas that have not yet been logged or undergone development and are thus believed extant (Norvell 2002 pers comm).

## Population Size

U = Unknown

**Comments** Records reflect only species occurrence, i.e. fruitbodies, not numbers of individuals. Genets of ectomycorrhizal fungi cannot be delimited without DNA sampling. Distribution is extremely spotty and the populations appear to be unusually small for the genus.

## Range Extent

F = 20,000-200,000 km<sup>2</sup> (about 8,000-80,000 square miles)

**Comments** Endemic to the northern spotted region in western North America, in Oregon *Phaeocollybia scatesiae* is known from the Cascade Head Experimental Forest south along the Oregon coast south to the Coos Bay area and then east to Larch Mountain on the Columbia Gorge and south along the western slope of the Cascade Range to southeast of Salem. (ISMS 2002 database; Norvell 1995a, 1998ab, 2002 pers comm).

## Area of Occupancy

U = Unknown

LU = Unknown

**Comments** Occupancy is highly spotty and cannot be extrapolated for this organism, which appears restricted to fairly complex environments. For fungi can only estimate area occupancy from fruitbodies as vegetative organism is underground had has unknown biological and ecological requirements that determine how and when ectomycorrhizal associations are formed with coniferous host trees. The fungus fruits sporadically (not annually).

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



## Environmental Specificity

A = Very Narrow. Specialist or community with key requirements scarce.

**Comments** *P scatesiae* is a mycorrhizal fungus that occurs in well-decomposed wood or woody humus in densely canopied coniferous forests from where it sends long rhizomorph-like strands that appear to connect it to its symbiotic partner. It is most frequently (but not exclusively) associated with *Picea sitchensis*, *Abies*, and/or (possibly) *Vaccinium* species. Its precise biological and ecological requirements still remain unknown. (Norvell 1998ab, 2002 pers comm).

## Other Considerations

ORNHIC - List 3. Distribution is extremely spotty. Is usually easily identified in the field by the densely cespitose fruitbodies that can number over 100 within a single clump. Can be difficult to identify if only a single fruiting body is collected. Fruits only sporadically, but one site in the Van Duzer Corridor of Oregon has been sampled at least six times since its discovery in 1992. (Norvell pers comm 2002). Additional occurrences are to be expected in coastal spruce or low-lying coniferous forests with *Abies* present. Fruits late in the season and so may not have been found by previous researchers. There are several protected sites.

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

**Grank** S3?      **Grank Date** 11/18/2002

## Greasons

The species appears fairly well protected in Oregon. It appears long-lived: at the Van Duzer Wayside in Oregon, one site has been successfully sampled six times since 1992, and collections have been documented from the nearby Cascade Head Experimental Research Forest from 1970 to 1995. It remains vulnerable to hot fires in protected reserves. Total predicted occurrences are probably around ~40 within Oregon. Distribution is extremely spotty, localized small areas followed by absence in presumably prime habitat, so that large areas within the overall range appear uninhabited by the organism.. The spotty distribution and unpredictable phenology complicate ranking this organism.

## BCD Sources

## New Sources

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. 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. ALSO Castellano et al. 1999. Handbook to Strategy 1 Fungal Species in the Northwest Forest Plan. USDA-FS PNWRS PNW-GTR-476. ALSO ISMS map on PHSC13 & ISMS 2002 database.