

# Heritage Rank Status Factors

**Elcode** NFSM000056  
**Gname** DICHOSTEREUM BOREALE  
**Gcomname**

## Number of Occurrences

U = Unknown

**Comments** A widespread species collected in western and eastern Europe, the West Indies, and North America, where it is known from 3 provinces and 11 states (Ginns & Lefebvre 1993, Gilbertson et al 1975, Castellano 1999). Associated with white rot on fallen trees (Pinaceae), common in the Rocky Mtns and rare in the west. Insufficient data available for estimating number of occurrences worldwide. 7 collections were verified from the northern spotted owl region of Pacific Northwest North America during the Northwest Forest Plan Strategy 1 herbarium evaluation (Norvell 1995).

## Number of Occurrences with Good Viability

U = Unknown what number of occurrences with good viability

**Comments** Dependent on substrate. Reported generally only in taxonomic treatises, check-lists, and culture studies; no ecological studies made.

## Population Size

U = Unknown

**Comments** Presumed limited to substrate, usually cited as being "dead conifer logs".

## Range Extent

H = > 2,500,000 km<sup>2</sup> (greater than 1,000,000 square miles)

**Comments** Distribution is disjunct, with populations verified from eastern and western Europe, the West Indies, and North America. Regarded as common in dry land habitats east of the Rocky Mountains in western North America but extremely rare west of the Rocky Mountains. In North America reported from eastern and western Canada (AB, BC, ON) and the central and western United States (AZ, CO, ID, MI, MN, MT, NH, NM, OR, SD WA)

## Area of Occupancy

U = Unknown

LU = Unknown

**Comments** As the organism is substrate dependent and has been reported generally only in taxonomic treatises, check-lists, and culture studies, an estimate of the area of occupancy cannot be made at this time.

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

U = Unknown. Long-term trend in population, range, area occupied, or number or condition of occurrences unknown

**Comments** Dependent on substrate and other unknown factors. Reported generally only in taxonomic treatises, check-lists, and culture studies; no ecological studies made.

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

U = Unknown. Short-term trend in population, range, area occupied, and number and condition of occurrences unknown.

**Comments** Dependent on substrate and other unknown factors. Reported generally only in taxonomic treatises, check-lists, and culture studies; no ecological studies made.

### **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].)

<b>Scope</b>	Unknown	<b>Severity</b>	Unknown	<b>Immediacy</b>	Unknown
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**Comments** Removal of substrate -- coniferous logs -- by fire, landscaping, or other hazards would remove fungus. *Dichostereum granulorum* is listed as threatened on the Norwegian Red List. (There are no collections held within the Oslo Mycological herbarium. This may represent either *D. boreale* under a misapplied name or another fungus.) Most known historical sites in the northern spotted owl region are on unprotected land. Only one recent collection has been made.

### **Number of Appropriately Protected and Managed Occurrences**

A = None. No occurrences appropriately protected and managed

**Comments** One occurrence may be located in a riparian reserve. As Riparian Reserve sites may be imperiled if governmental management policies change, that occurrence cannot be considered to be protected.

### **Intrinsic Vulnerability**

B = Moderately Vulnerable. Species exhibits moderate age of maturity, frequency of reproduction, and/or fecundity such that populations generally tend to recover from decreases in abundance over a period of several years (on the order of 5-20 years or 2-5 generations); or species has moderate dispersal capability such that extirpated populations generally become reestablished through natural recolonization (unaided by humans). Ecological community occurrences may be susceptible to changes in composition and structure but tend to recover through natural processes given reasonable time (10-100 years).

**Comments** Removal or destruction of substrate coniferous logs by fire, landscaping, or heavy logging would seriously jeopardize the organism.

### **Environmental Specificity**

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

B = Narrow. Specialist or community with key requirements common.

**Comments** Dependent on coniferous substrate and other unknown factors. Ginns & Lefebvre (1993) indicate that the substratum is probably gymnosperm logs and note that one report of the fungus from an eastern collection on *Crataegus* may be in error. They did not examine the collection to verify the identification.

### **Other Considerations**

As the fungus occurs on the undersides of logs, it is probably under-reported because of its inconspicuous nature and the difficulty in finding it. It is not surprising that no collections were made during recent Survey & Manage surveys. The fact that during the Northwest Forest Plan Strategy 1 evaluation process, several WTU herbarium "*Vararia* sp." collections were determined as *Dichostereum boreale* suggests that more study is needed before this is listed as a rare or threatened fungus. Previous synonyms include *Vararia borealis*, *Vararia*

granulosa, and the misapplied names *Grandinia granulosa* and *Dichostereum granulosum*.

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

**Grank** G4?      **Grank Date** 11/18/2002

### Greasons

Distribution is disjunct, with populations verified from eastern and western Europe, the West Indies, and North America. In North America, reported from eastern and western Canada and the central and western United States. Regarded as common in dry land habitats east of the Rocky Mountains in western North America but extremely rare west of the Rocky Mountains. Too much is unknown about the requirements of this little-collected and easily overlooked organism that resembles a paint-like smear on the underside of logs.

### 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 Redlist of Threatened Fungi in Norway: <http://www.toyen.uio.no/botanisk/bot-mus/sopp/redgroup.htm>. ALSO Pouzar. 1962. Ceska Mykologie 36(2): 72-76. ALSO U.S. National Fungus Collections databases <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 with the Regional Mycologist's office in Corvallis, Oregon.