

## Heritage Rank Status Factors

**Elcode** NFSM000176  
**Gname** RICKENELLA SWARTZII  
**Gcomname** Omphale de Swartz

### Number of Occurrences

C = 21- 80

**Comments** Estimated number of occurrences is 21-80. The ISMS database contains 18 records: 2 in California, 5 in Washington, the rest unspecified. The University of Michigan Fungal Bioinformatics Project database documents 1 site in California and 2 in Washington. It is unknown whether any of these sites is identical. Other areas where this species has been noted include Montana and many places in Europe: The Czech Republic, England, Finland, France, Germany, The Netherlands and possibly Italy.

### Number of Occurrences with Good Viability

U = Unknown what number of occurrences with good viability

**Comments** Unknown.

### Population Size

U = Unknown

**Comments** It is unknown how many individual organisms are located at each site of occurrence and there is no estimation as to how large each organism is and how many fruiting bodies it has.

### Range Extent

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

**Comments** Estimated range greater than 1,000,000 square miles worldwide. Primarily found in the Northwest United States (including Montana) and northern Europe.

### Area of Occupancy

A = <0.4 km<sup>2</sup> (less than about 100 acres)

LA = <4 km (less than about 2.5 miles)

**Comments** It is unknown how many individual organisms are located at each site of occurrence and there is no estimation as to how large each organism is and how many fruiting bodies it has. However, assuming that each occurrence occupies 1 square meter, the worldwide occupancy is estimated to be 80 square meters ( .02 acre).

### 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** Unknown.

## 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** Unknown.

## Threats

B = Moderate and imminent threat. Threat is moderate to severe and imminent for a significant proportion (20-60%) of the population, occurrences, or area. Ecological community occurrences are directly impacted over a moderate area, either causing irreversible damage or requiring a long-term recovery.

**Scope** Moderate      **Severity** Moderate      **Immediacy** Moderate

**Comments** Moderate and imminent threat. Widespread logging, road and trail construction, or other activities that destroy the mossy substrate in late- successional forests on which this species occurs may threaten this species. Because this species prefers late-successional forest, destruction of its habitat indicates that harmed populations would require a long recovery time.

## Number of Appropriately Protected and Managed Occurrences

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

**Comments** The ISMS database notes 2 protected occurrences in Washington. The University of Michigan Fungal Bioinformatics Project database also records 2 protected sites in Washington. It is assumed that the Washington sites noted in both databases are identical. It is unknown to what degree populations are protected in Montana and in other countries.

## 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** Moderately vulnerable. Fruiting bodies are rather small and fragile.

## Environmental Specificity

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

**Comments** Narrow environmental specificity. Associated with moss in late- successional forests and often found in alpine areas.

## Other Considerations

Nrank - N4. Many of the noted references from other countries document official collections or identifications of this species by mycological clubs.

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**Grank** G4      **Grank Date** 11/27/2002

## Reasons

Primarily found in the Northwest United States (including Montana) and northern Europe. Estimated number of occurrences is 21-80. It is unknown how many individual organisms are located at each site of occurrence and there is no estimation as to how large each organism is and how many fruiting bodies it has. Estimated range is

greater than 1,000,000 square miles worldwide. Long-term and short-term trends are unknown. Moderate and imminent threat. The ISMS database notes 2 protected occurrences in Washington. Moderately vulnerable. Narrow environmental specificity. Because of a lack of collections and information about this species and the widespread possible habitat for this species, the guide for ranking poorly known species was used to assign the Grank. This species appears to prefer late-successional alpine forests.

## BCD Sources

### New Sources

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