

## Heritage Rank Status Factors

**Elcode** NF00SEPU15  
**Gname** SEDECULA PULVINATA  
**Gcomname**

### Number of Occurrences

B = 6 - 20

**Comments** These fruiting bodies are at or just under the surface of the soil and are up to 6 cm broad, white to gray on the surface with a marbled (shades of gray to black) interior that becomes powdery in age. One site is known within the range of the northern spotted owl; most of the known sites are in the Great Basin and adjacent states (Castellano et al. 1999, Fogel n.d., Fogel and States n.d.). Only about a dozen total sites are known for it. It appears to be rare throughout its range and to be restricted to relatively dry habitats.

### Number of Occurrences with Good Viability

C = Few (4-12) occurrences with good viability

**Comments** Only sites so far represented by more than 2 collections from a site on different trips are the Colorado site near Boulder, one in Washington Co., Utah, and one in Placer Co., California (Fogel, R. n.d. ). Only the Colorado site appears to have been visited more than one year and produced specimens.

### Population Size

A = 1-50 individuals

**Comments** This can not be determined; records reflect only species presence.

### Range Extent

G = 200,000-2,500,000 km<sup>2</sup> (about 80,000-1,000,000 square miles)

**Comments** Its range extends from one site from near Boulder, CO to Coconino Co., AZ, Fresno and Shasta Cos. in California and Valley Co. , ID.

### Area of Occupancy

U = Unknown

LU = Unknown

**Comments** Short of using molecular tools there is no way to evaluate occupancy. For a species that fruits in isolated mountain ranges in the Great Plains, suitable habitat is scarce and occupancy over all is likely to be very low.

### 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** Only two localities, both outside the region of the northern spotted owl, seem to have been visited more than once and produced specimens on each visit, but there is no way to tell how many

unsuccessful forays were undertaken, thus there is insufficient information to evaluate this feature.

### 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** insufficient information to evaluate this feature

### Threats

D = Moderate, non-imminent threat. Threat is moderate to severe but not imminent for a significant portion of the population, occurrences, or area.

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

**Comments** This species is widely distributed and thus unlikely to be wiped out by local events; however, it is very patchy in its occurrence within its range. Logging and development are the main threats as this species is likely mycorrhizal and dependent on associated trees for many of its nutritional needs.

### Number of Appropriately Protected and Managed Occurrences

A = None. No occurrences appropriately protected and managed

**Comments** The single site in the ISMS data is not protected; some of the sites in the Great Basin may be protected at some level but there was not time enough to explore that possibility.

### Intrinsic Vulnerability

U = Unknown

**Comments** Little information is available on its ecology so it is difficult to assess vulnerability. Over its range, it occurs with Ponderosa pine sometimes mixed with *Pseudotsuga menziesii*, *P. monophylla*, *Quercus gambellii*, *Abies concolor* based on label data; Castellano et al. (1999) also list *A. lasiocarpa*, *A. magnifica*, *Pinus contorta*, and *Picea englemannii*. In so far as these species and their habitats are vulnerable, *Sedecula* is vulnerable.

### Environmental Specificity

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

**Comments** This species is one of relatively dry forests with relatively low annual rain fall; what other factors other than the presence of suitable trees determine its survival remain to be discovered.

### Other Considerations

NRANK - N3. *Sedecula* is a monospecific genus known only from relatively dry forests of the American West where it apparently fruits irregularly and seldom in quantity.

**Edition** 11/11/2002                      **Edauthor** Nancy S. Weber

**Grank** G3                      **Grank Date** 11/25/2002

### Reasons

*Sedecula* is reported from about a dozen sites and roughly 20 collections world-wide, all in the Western United States. This is a small harvest for a species that has been known since the early 1940s (Zeller 1941). Within the range of the northern spotted owl only one site has been located, elsewhere it occurs in the front range of the Rocky Mts., and in the Great Basin and neighboring states. The fruiting bodies are large enough to be easily found, but colored much like some rocks thus complicating the search process. It is deserving of further study

and conservation.

## **BCD Sources**

### **New Sources**

Zeller, S.M. 1941. Further notes on Fungi. *Mycologia* 33: 196-214.

Fogel, R. n.d. MICH Fungal Bioinformatics Project. Retrieved 2002.11.06 from  
<http://www.herb.lsa.umich.edu/Bioinformatics.htm>.

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States, J. n.d. Provisional Checklist of hypogeous fungi occurring in the Great Basin and Arizona. Retrieved  
2002.11 from <http://www.herb.lsa.umich.edu/gbsurvey/checklist.htm>.

Castellano, M.A., Smith, J.A., O'Dell, T., Cazares, E., and Nugent, S. 1999. Handbook to Strategy 1 Fungal  
Species in the Northwest Forest Plan. Portland, Oregon: USDA Forest Service, PNWRS PNW-GTR-476.