

Heritage Rank Status Factors

Elcode NF000PSQU2
Gname PSEUDALEURIA QUINAULTIANA

Gcomname

Number of Occurrences

B = 6 - 20

Comments The fruiting bodies of this species are bright orange red cups that become more or less flat in age and seldom exceed 35 mm in diameter. They appear from late winter into spring in recently disturbed areas where they may fruit for a couple of springs in succession. This species is endemic to Washington and Oregon and is known only within the range of the northern spotted owl. Two sites from Oregon (Lincoln and Marion Cos.) and two in Washington (Clallam Co., and Grays Harbor Co.) are cited by Castellano et al. (1999); I know of at least 2 other sites in Oregon, one in Clackamas Co., and one in Lincoln Co.

Number of Occurrences with Good Viability

U = Unknown what number of occurrences with good viability

Comments Apparently this species fruits in response to small scale disturbances in mature to old forests such as construction and road scraping sites, trail maintenance sites, soil disturbances accompanying uprooting of trees, etc. It appears to be an early colonizer and temporary resident of such sites. At one site, it fruited in the same site in Washington for 4 years (Lusk 1987); no comparable data seems to have been gathered on the Oregon populations. Nothing is known of its nutritional mode, it could be mycorrhizal and fruit in response to the death or decline of its host or it could be saprobic.

Population Size

U = Unknown

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

Range Extent

F = 20,000-200,000 km² (about 8,000-80,000 square miles)

Comments It is known from Clallam and Grays Harbor Cos. in Washington; in Oregon its known range extends from s.w. of Estacada south to Silver Falls State Park and possibly into central Lane Co. and west to Lincoln Co. (Castellano et al. 1999, NSW collections).

Area of Occupancy

U = Unknown

LU = Unknown

Comments This fungus is known to fruit only in temporary habitats, relatively small scale disturbances in forested areas. Whether the mycelia are widely distributed or the organism is present only as dormant spores between sightings (both in time and space) is unknown. Short of using molecular tools there is no way to evaluate occupancy.

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 insufficient information to allow for meaningful comments

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 allow for meaningful comments

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 If, as it appears, this species fruits only in small disturbed areas in mature forests, then maintaining forest cover is important--as is disturbing it on a small scale in suitable ways from time to time. Removal/destruction of low elevation (primarily) moist mature forests is the major threat to this species. I'm at a loss as to how to rate this species.

Number of Appropriately Protected and Managed Occurrences

C = Several (4-12) occurrences appropriately protected and managed

Comments Of the five sites mentioned by Castellano et al. (1999), one is in a Wilderness Area, two are in Olympic National Park, and one in a state park in Oregon. As for the ISMS data, only 4 sites are mentioned of which only one is in a protected area. The information we were furnished in confusing to say the least!

Intrinsic Vulnerability

C = Not Intrinsically Vulnerable. Species matures quickly, reproduces frequently, and/or has high fecundity such that populations recover quickly (< 5 years or 2 generations) from decreases in abundance; or species has high dispersal capability such that extirpated populations soon become reestablished through natural recolonization (unaided by humans). Ecological community occurrences are resilient or resistant to irreversible changes in composition and structure and quickly recover (within 10 years).

Comments This rating was assigned because the species occurs in temporary habitats in the form of small scale disturbances such as result from windthrows. As long as there are forestes, trees will become uprooted.

Environmental Specificity

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

Comments This species is dependent on small scale disturbance associated with mature conifers, a rather unusual habitat.

Other Considerations

NRANK - N2. Just because this species appears to be very specific in the conditions under which it will fruit and is associated with disturbance, it does not follow that there is no point in protecting areas where it is known to fruit. If ever there was a fungal species for which habitat protection was important, this is it.

Edition 11/18/2002 **Edauthor** Nancy S. Weber

Grank G2 **Grank Date** 11/18/2002

Greasons

This species was described from Washington and is known from fewer than a dozen sites in Oregon and Washington where it fruits in temporary habitats such a soil disturbed when a tree is uprooted. Even in such habitats it is uncommon. The bright orange-red cups are easily spotted so the low number of collections is significant.

BCD Sources

New Sources