

Heritage Rank Status Factors

Elcode NFSM000024
Gname CHROOGOMPHUS LOCULATUS
Gcomname

Number of Occurrences

A = 1 - 5

Comments There are only 4 known occurrences, all in Oregon. Believed to be undergoing taxonomic evaluation: may represent only an environmental variation of the common *Chroogomphus tomentosus*. Molecular confirmation needed.

Number of Occurrences with Good Viability

U = Unknown what number of occurrences with good viability

Comments The reproducibility of the 5 known collections has not been demonstrated. Believed to be undergoing taxonomic evaluation: may represent only an environmental variation of the common *Chroogomphus tomentosus*. Molecular confirmation needed.

Population Size

Comments Believed to be undergoing taxonomic evaluation: may represent only an environmental variation of the common *Chroogomphus tomentosus*. Molecular confirmation needed.

Range Extent

D = 1,000-5,000 km² (about 400-2,000 square miles)

Comments Known only from the Willamette National Forest in Oregon. (Miller & Trappe 1970; ISMS-ONH 2002.) Believed to be undergoing taxonomic evaluation: may represent only an environmental variation of the common *Chroogomphus tomentosus*. Molecular confirmation needed.

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. Vegetative organism is underground and has unknown biological and ecological requirements that determine how and when ectomycorrhizal associations are formed with coniferous host trees. Believed to be undergoing taxonomic evaluation: may represent only an environmental variation of the common *Chroogomphus tomentosus*. Molecular confirmation needed.

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 Believed to be undergoing taxonomic evaluation: may represent only an environmental variation of the common *Chroogomphus tomentosus*. Molecular confirmation needed.

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 Believed to be undergoing taxonomic evaluation: may represent only an environmental variation of the common *Chroogomphus tomentosus*. Molecular confirmation needed.

Threats

Scope

Severity

Immediacy

Comments Believed to be undergoing taxonomic evaluation: may represent only an environmental variation of the common *Chroogomphus tomentosus*. Molecular confirmation needed.

Number of Appropriately Protected and Managed Occurrences

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

Comments Of the 4 known occurrences, 2 lie within late-successional reserve forests. The opening of late-successional to logging, road construction, or development, could decrease the protected & managed occurrences to 0 (Rank A). CHLO2 is believed to be undergoing taxonomic evaluation (Norvell pers comm 2002): may represent only an environmental variation of the common *Chroogomphus tomentosus*. Molecular confirmation needed.

Intrinsic Vulnerability

Comments Believed to be undergoing taxonomic evaluation: may represent only an environmental variation of the common *Chroogomphus tomentosus*. Molecular confirmation needed.

Environmental Specificity

Comments Believed to be undergoing taxonomic evaluation: may represent only an environmental variation of the common *Chroogomphus tomentosus*. Molecular confirmation needed.

Other Considerations

NRANK - NU. Needs taxonomic revision. Orson K Miller and Jim Trappe should both be consulted before this mushroom is ranked as a G1-S1 fungus.

Edition 11/24/2002 **Edauthor** Lorelei L Norvell

Grank GUT1Q **Grank Date** 11/24/2002

Greasons

The taxon called *Chroogomphus loculatus* is restricted to 4 sites in the Willamette National Forest of Oregon. (ISMS 2002 data and map for CHLO2). This fungus should NOT be ranked until after molecular comparisons of specimens representing CHLO2 and the common *Chroogomphus tomentosus* are complete. *C. loculatus* was described in 1970 by Orson K Miller and James Trappe. Miller noted to Norvell in 2001 that he now considers the form named "loculatus" to represent an environmental variant of *C. tomentosus*, indicating that one of his

students had tested this hypothesis molecularly. Miller has not yet responded to Norvell's queries as to the final outcome of the analyses, and Jim Trappe should also be consulted before a decision is made. IF CHLO2 is based on an independent species, it would be considered rare. Norvell (2002 pers comm) also evaluated one of the ISMS collections for the Regional Mycologist in Corvallis and noted that it was only partly loculate and resembles *Chroogomphus tomentosus* in microscopic characters.

BCD Sources

New Sources

Miller & Trappe. 1970. A new *Chroogomphus* with a loculate hymenium and a revised key to section *Floccigomphus*. *Mycologia* 62:831-836.

ISMS-ONH. 2002. ISMS data; ONH protection extrapolations; GIS map for CHLO2.