Washington Status Factors

Elcode NF000HYLU6

Gname HYPOMYCES LUTEOVIRENS

Gcomname

Number of Occurrences

B = 6 - 20

Comments This species is a parasite on fruiting bodies of mushrooms, primarily species of Russula and Lactarius; it imparts a yellow or green color to them. This species is reported in ISMS from five sites in Washington in the range of the northern spotted owl. No information was found on collections from other parts of the state, but appropriate herbarium surveys could not be conducted.

Number of Occurrences with Good Viability

B = Very few (1-3) occurrences with good viability

Comments The on collection listed in the ISMS data base is protected in a G1/2 area, one is in an LSR so its viability may be limited by land management decisions; at present it is not protected.

Population Size

U = Unknown

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

Range Extent

E = 5,000-20,000 km2 (about 2,000-8,000 square miles)

Comments Data not sufficient to provide a good idea of the range in verbal terms. It is known from the Gifford Pinchot and Wenatchee National Forests, and Mt. Rainier National Park for sure.

Area of Occupancy

U = Unknown

LU = Unknown

Comments Short of using molecular tools there is no way to evaluate this factor.

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 Depends on the host fungi most of which are mycorrhizal with forest trees and on the amount of coarse woody debris colonized by woody polypores thus as forests shrink and coarse woody debris decrease, this species may decline in area occupied, and in population size.

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 Depends on the host fungi most of which are mycorrhizal with forest trees and on the amount of coarse woody debris colonized by woody polypores thus as forests shrink and coarse woody debris decrease, this species may decline in area occupied, and in population size.

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 Factors that affect the survival of the host species are important to the survival of this species; the common hosts are ecotomycorrhizal fungi and thus depend on certain species of trees for their survival. Certain bracket fungi also serve as hosts for this species so the elimination of coarse woody debris from forests may adversely impact this species indirectly. Threats are primarily from logging and development in the areas this species most likely occurs; fire is a lesser threat in the moist areas.

Number of Appropriately Protected and Managed Occurrences

B = Few (1-3) occurrences appropriately protected and managed
C = Several (4-12) occurrences appropriately protected and managed

Comments In the ISMS data set, all five Washingot sites may be protected. One is in a GAP 1/2 area and is likely to be protected for some time. One is in a Riparian Reserve and one in a Late Successional Reserve; the future of these Reserves is a matter of debateot

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 The species is a parasite and thus activities that affect its hosts will impact it. Its usual hosts are forest-dwelling ectomycorrhizal macrofungi or saprobes on fungi on coarse woody debris. These host species are generally more abundant in mature forests than in young ones. In so far as these forests are vulnerable to modification from natural causes and human activities this species is vulnerable as well.

Environmental Specificity

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

Comments The host genera, especially Russula and Lactarius, are widely distributed in the northern hemisphere ; however, only a few species in each genus are know to support this fungus. Both genera are associated with trees; many kinds of trees may support these fungi. Thus the specificity of this species is largely that of the hosts.

Other Considerations

This fungus is easy to spot when it is present, but has been found relatively few times in Oregon, primarily at mid-elevation sites with moist, mature, coniferous forests.

Edition 11/16/2002 **Edauthor** Nancy S. Weber

Grank S3 **Grank Date** 11/25/2002

Greasons

Few (less the a half dozen) occurences of this species are documented from Washington; it is relatively rare compared to its host/substrate species. It is a special day when one finds this species. More studies are needed to see if it really is this scarce throughout the state, if so it might be worthy of S2 status.

BCD Sources

New Sources

Fogel, R. n.d. MICH Fungal Bioinformatics Project. Retrieved 2002.11 from http://www.herb.lsa.umich.edu/Bioinformatics.htm.

OSC n.d. Mycological Collections Oregon State University. Retrieved 2002.11. from ttp://ocid.nacse.org/research/herbarium/myco/index.html.

Rogerson, C.T.and Samuels, G.J.1994. Agaricicolous species of Hypomyces. Mycologia 86 (839-866).