Heritage Rank Status Factors

Elcode NF000HYLU6

Gname HYPOMYCES LUTEOVIRENS

Gcomname

Number of Occurrences

U = Unknown

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. The species was described from Sweden and is widespread in north temperate regions. It has been reported from 12 European countries, 6 Canadian Provinces, 34 US states, and Japan (Rogerson and Samuels 1994); no accurate count of the number of occurrances could be made. In western North America, it is known from Alaska south into California. According to the ISMS database 11 sites for this species were located within the region of the northern spotted owl. Historic collections (pre 1950) from this region at MICH (Fogel n.d.) include 4 from Oregon, and 1 from Washington; one recent collection from Arizona is listed. Callan et al. (n.d.) list one collection from British Columbia. The OSC (n.d.) web site lists a single collection from Washington.

Number of Occurrences with Good Viability

U = Unknown what number of occurrences with good viability

Comments Data of this sort is not available on a global scale.

Population Size

U = Unknown

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

Range Extent

H = > 2,500,000 km2 (greater than 1,000,000 square miles)

Comments Probably through out the cooler parts of the North Temperate zone but little information is available on the fungi of the former Soviet Union and much of Asia.

Area of Occupancy

U = Unknown

LU = Unknown

Comments 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 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

G = Slightly threatened. Threats, while recognizable, are of low severity, or affecting only a small portion of the population, occurrences, or area. Ecological community occurrences may be altered in minor parts of range or degree of alteration falls within the natural variation of the type.

Scope Low Severity Low Immediacy Low

Comments Given the broad distribution of these species, it is unlikely to be eliminated throughout its range under normal circumstances. 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.

Number of Appropriately Protected and Managed Occurrences

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

Comments It is impossible to tell on a world basis, this number is based on what is known for the region covered by the Northwest Forest Plan.

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 or saprobe and thus activities that affect its hosts /substrates will impact it. Its usual hosts are forest-dwelling ectomycorrhizal macrofungi or saprobes on coarse woody debris. These host species are generally more abundant in mature forests than in young ones.

Environmental Specificity

D = Broad. Generalist or community with all key requirements common.

Comments The host genera, especially Russula and Lactarius, are widely distributed in the northern hemisphere and they, or closely related genera, also occur in the southern hemisphere. 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

NRANK - N4.

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Greasons

Within the broad range of this species, documented occurences are relatively few compared to those of the host species and to some other species in the genus. It is a special day when one finds this species in the woods.

BCD Sources

New Sources

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

Callan, B., Dennis, J., Thomson, A., Bahl, and Crawford, C. n.d. Pacific Forestry Centre's Forest Pathology Herbarium (DAVFP) Collections Database. Retrieved 2002.11.12 from http://www.pfc.forestry.ca/biodiversity/herbarium/voucher_specimens_e.html.

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).