

A PRELIMINARY SURVEY OF THE FUNGI OF SAPA SPRUCE BOG

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INTRODUCTION

Sapa Spruce Bog is the southernmost black spruce bog in Wisconsin. The 12 acre bog and 11 acres of surrounding swamp hardwoods were purchased by The Nature Conservancy in 1983; title to the property was transferred to the UWM Field Station in 1988. An extensive study of the fungi of Sapa Spruce Bog was started during the summer of 1989. The site was divided into three collecting zones--the swamp hardwoods surrounding the bog, the tamarack/black spruce zone, and the central, open sphagnum mat zone.

Greatest species diversity has been observed in the swamp hardwoods; many fungi identified from this zone have also been recorded from the Field Station beech/maple woods (Parker, 1987 and 1988). Factors contributing to the greater diversity of fungi in this zone include the composition of leaf litter and humus, the larger amount of downed logs in various stages of decay, and the variety of tree species with their associated mycorrhizal and wood-rotting fungi.

Among the most interesting fungi identified from the tamarack/black spruce zone are two boletes (*Fuscoboletinus spectabilis* and *Suillus grevillei*) and a gill mushroom (*Laccaria laccata* var. *molleri*). These species are very characteristic of sphagnum bogs, and are ectomycorrhizal with tamarack and black spruce in this habitat. Many of the dead tamarack and black spruce trunks are small diameter and partially standing. These trunks do not retain water as well as larger diameter, downed logs, making it difficult for many wood-rotting fungi to become established. Because of this, the community of wood-rotting Basidiomycetes on these trees appears to be limited. No fungi have been collected in the open sphagnum mat zone that have not also been found in the tamarack/black spruce zone.

The following 57 species are reported as new records from Sapa Spruce Bog. A number of small gill mushroom taxa remain to be identified. Specimens of most taxa have been deposited in the mycological herbarium of the Milwaukee Public Museum (MIL). I am indebted to Joanne Kline for partially defraying travel expenses with funds received through a Lois Almon Research Grant. Sincere appreciation is extended to John Steinke for his assistance in collecting, and to Michael Larsen for identifying certain Basidiomycetes.

SPECIES LIST

MYXOMYCETES

Liceales

Reticulariaceae

- Lycogala epidendrum (L.) Fr.
Tubifera sp.

Physarales

Didymiaceae

- Diderma sp.

Physaraceae

- Physarum viride (Bull.) Pers.
Physarum sp.

Stemonitales

Stemonitaceae

- Stemonitis fusca Roth
Stemonitis splendens Rost.

ASCOMYCETES

Caliciales

Mycocaliciaceae

- Phaeocalicium polyporaeum (Nyl.) Tibell on Trichaptum bifforme

Helotiales

Geoglossaceae

- Geoglossum glabrum Pers. (Earth tongue)
Microglossum rufum (Schw.) Under. (Orange earth tongue)

Helotiaceae

- Bisporella citrina (Fr.) Korf & Carpenter (Yellow cup)

Hypocreales

Hypocreaceae

- Hypocrea patella Cooke & Peck

Hypomycetaceae

- Hypomyces chrysospermus Tul. on unidentified bolete
Hypomyces luteovirens (Fr.) Tul. on Lactarius sp.

Pezizales

Humariaceae

Scutellinia sp. (Eyelash cup)

Sphaeriales

Xylariaceae

Daldinia concentrica (Bolt. : Fr.) Ces. & DeNot. (Cramp balls)

Hypoxylon sp.

Ustulina deusta (Fr.) Pet.

HOLOBASIDIOMYCETES - HYMENOMYCETES

Agaricales

Amanitaceae

Amanita fulva Pers. (Tawny grisette)

Boletaceae

Fuscoboletinus spectabilis (Pk.) Pomerleau & Smith

Leccinum scabrum (Fr.) S.F. Gray (Scaber stalk)

Suillus grevillei (Klotzsch) Singer

Cortinariaceae

Cortinarius sp.

Hygrophoraceae

Hygrocybe cantharellus (Schw.) Lange

Hygrocybe conica (Fr.) Kummer (Waxy cap)

Russulaceae

Russula sp.

Strophariaceae

Naematoloma fasciculare (Fr.) Karst. (Sulfur tuft)

Tricholomataceae

Inocybe sp.

Laccaria amethystina (Hooker) Murr. (Purple-gilled Laccaria)

Laccaria laccata var. molleri Singer

Mycena haematopus (Fr.) Kummer (Bleeding Mycena)

Phyllotopsis nidulans (Pers. ex Fr.) Sing. (orange mock oyster)

Resupinatus applicatus (Bat. ex Fr.) S.F. Gray

Aphylliphorales

Cantharellaceae

Cantharellus sp.

Clavariaceae

Clavicornia pyxidata (Fr.) Doty (Crowned coral)

Ganodermataceae

Ganoderma applanatum (Pers. ex Wallr.) Pat. (Artist's conk)

Hymenochaetaceae

Phellinus chrysoloma (Fr.) Donk

Phellinus gilvus (Schw.) Pat.

Meruliaceae

Merulius tremellosus Fr.

Polyporaceae

Coriolus versicolor (L. : Fr.) Quel. (Turkey-tail)

Daedaleopsis confragosa (Bolt. : Fr.) Schroet. (Currycomb)

Fomes fomentarius (L. : Fr.) Kickx (Tinder polypore)

Haplophilus nidulans (Fr.) Karst. (Nesting polypore)

Irpex lacteus (Fr. : Fr.) Fr.

Phaeolus schweinitzii (Fr.) Pat.

Polyporus elegans Bull.: Fr.

Trichaptum biforme (Fr. in Kl.) Ryv. (Violet-toothed polypore)

Schizophyllaceae

Plicaturopsis crispa (Fr.) Reid (Crimped gill)

Schizophyllum commune Fr. (Split gill)

Stereaceae

Stereum ostrea (Blume & Nees : Fr.) Fr. (False turkey-tail)

Thelephoraceae

Tomentella coerulea (Bres.)

HOLOBASIDIOMYCETES - GASTEROMYCETES

Lycoperdales

Lycoperdaceae

Lycoperdon pedicellatum Pk.

Lycoperdon pyriforme Schaeff. : Pers. (Pear-shaped puffball)

Nidulariales

Sphaerobolaceae

Sphaerobolus stellatus Pers.

Sclerodermatales

Sclerodermataceae

Scleroderma citrinum Pers. (Hard-shelled puffball)

HETEROBASIDIOMYCETES

Dacrymycetales

Dacrymycetaceae

Dacrymyces palmatus (Schw.) Bres. (Orange conifer jelly)

Exobasidiales

Exobasidiaceae

Exobasidium vaccinii (Fckl.) Wor.

LITERATURE CITED

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