

Report on Research in Mycology, 30 March - 5 April, 1966.

by

T.W. Johnson, Jr.
Duke University,
North Carolina, U.S.A.

The following is a brief report, in compliance with Icelandic regulations, on work done by myself and W.L. Howard (graduate assistant) in Iceland, 30 March - 5 April, 1965.

Four days were spent in collecting samples of driftwood from shoreline locations on the West and South coasts. Fungi were found in 73 of these collections. Specimens were removed from the substratum and preserved in small vials of formalin.

In addition, 40 soil samples were collected. These were air-dried, packaged and stored. Soil samples were taken from diverse ecological habitats, along shorelines, roads, and from open areas under mosses and lichens.

All samples are to be taken to the investigator's laboratory. Fungi occurring on driftwood will be sectioned and identified, and notations made as to species distribution. The soil samples will be treated in the usual manner used to collect aquatic fungi, by adding water to the soil and placing bits of snake skin, hempseed and pollen in the dishes. By this method, we should be able to collect soil-inhabiting species of the primitive fungi.

Collecting areas:

- (1) South shore of Hvalfjörður, North of Reykjavik
- (2) Shoreline of coastal embayments East of Hafnir
- (3) Hot springs area North of Krísuvík
- (4) Shoreline of South coast of Reykjanes Peninsula, approximately 20 km East of Grindavík.

When the fungi are identified, a completed list, together with specimens, will be sent for deposit to Dr. Eythor Einarsson, Natural History Museum, Reykjavik

On 4 April 1965, a survey for fungal substrates was made on Surtsey. Driftwood occurring on the East, North and Northeast coasts was generally very dry, and apparently had not been immersed in seawater long enough to become infested by marine fungi. A few bits of driftwood, obviously infested were found along the shore of the small lagoon. Drift algae, primarily Ascophyllum, were also found. These were living or dead segments of whole plants. Specimens of the dead material were collected, and will be incubated subsequently for fungi. Common air-borne molds are known to occur on decaying seaweeds, so it is possible that this substratum will be one source of fungal invasion on Surtsey.

A careful survey of lava rocks along the South coast of Surtsey was made for attached algae; none was found. The rocky shore should be examined regularly for the beginnings of intertidal algae. It is possible that the scouring action of water-borne lava particles will prevent the development of algae for some time, but this should be checked frequently.