A STUDY OF LICHENS FROM ABACO ISLAND, THE BAHAMAS

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Collections of lichens were made over a three year period to identify species found on Abaco Island, The Bahamas. The species identified were then compared with listings of species previously collected on other Bahamian islands.

The specimens were collected and identified according to the literature (Fink, 1935; Hale, 1961, 1971; Hale and Culberson, 1970; Nearing, 1947; Smith, 1921; Thomson, 1967). Thallus forms and substrates were noted while spore examinations were frequently made for species determination. Identified species were then compared with lichen species previously listed in the literature that were isolated in The Bahamas. Current collections were made in all areas of Abaco south of Marsh Harbor.

Cladonia species were present but not in abundance. Species identified in reforested pine areas included Cladonia capitata (Michx.) Spreng., C. chlorophaea (Flörke ex Somm.) Spreng., C. cristatella Tuck., C. floerkeana (Fr.) Flörke, C. gracilis (L.) Willd., C. phyllophora Hoffm., C. ravenelii Tuck., C. squamosa (Scop.) Hoffm., and C. verticillata (Hoffm.) Schaer. Two species of Ramalina were found including R. peruviana Ach. and R. usnea (L.) Howe. Graphis was present on many substrates. The Graphis species included G. afzelii Ach., G. botryosa Tuck., G. elegans (Borr. ex Sm.) Ach., G. pavoniana Fée and G. scripta (L.) Ach. Arthothelium spectabile (Flot. ex Fr.) Mass., Buellia disciformis (Fr.) Mudd, Graphina adscribens (Nyl.) Müll. Arg., Menegazzia terebrata (Hoffm.) Mass., Opegrapha pulicaris (Hoffm.) Schrad., Parmelia perforata (Jacq.) Ach., P. reticulata Tayl., Phaeographina plurifera (Nyl.) Fink, and Phaeographis dendritica (Ach.) Müll. Arg. were also found. The habitat of Graphis, Graphina and Phaeographina was primarily mangrove. Specimens were collected that appeared to be Parmelia cirrhata Fr. but according to Hale and Culberson (1970), records in North America are misidentifications.

All island areas surveyed were previously logged or burned during the past 60 years. Mature trees were few while a dense ground cover existed. In many island areas tree seedlings had an opportunity to grow for only a few years before deliberate fires were set in various regions to assist in the hunt of wild pigs. Virgin timber stands have been absent several years, and the few mature tree stumps remaining were almost completely decomposed. Mycological studies also have been recently made on the island (Volz and Beneke, 1972; Volz and Jerger, 1972; Volz, et al., 1975).

In the summer of 1903 the Geographical Society of Baltimore undertook a study in The Bahamas (Shattuck, 1905). At the time of the expedition, the islands were considered terra incognita to the rest of the world with comparatively insignificant trade relations to other countries. Scattered observations were made by expedition members W. C. Coker, C. A. Shore and F. M. Hanes. Islands included in the botanical expedition were George Island, Cat Island, Nassau, Andros, Eleuthera, Spanish Wells, New Providence, and Watlings Island while Abaco Island was not surveyed. Species identified included Arthonia cinnabaria (DC.) Wallr., A. spectabilis Flo. = Arthothelium spectabile (Flot. ex Fr.) Mass., Buellia disciformis (Fr.) Mudd, Chiodecton sphaerale Ach., Coenogonium disjunctum Nyl., Glyphis achariana Tuck., Graphis afzelii Ach., G. cicatricosa Fr. = Glyphis cicatricosa Ach., Graphis dumastii (Fée) Nyl., G. elegans (Borr. ex Sm.) Ach., G. lutea (Dicks.) Tuck. = Dimerella lutea (Dicks.) Trev., G. nitida Nyl. = Graphina nitida (Eschw. ex Mart.) Müll. Arg., Graphis poitaeoides Nyl., G. radiata Montague, Heterothecium domingense (Pers.) Flotow = Lopadium domingense (Pers.) Fink, H. tuberculosum (Fée) Flotow = Bombyliospora tuberculosa (Fée) Mass., Lecanora pallida (Schreb.) Rabenh., L. varia (Ehrh.) Ach., Leptogium marginellum (Sw.) S. Gray, Opegrapha varia Ach. = O. pulicaris (Hoffm.) Schrad., Pannaria molybdoea (Pers.) Tuck. = Coccocarpia pellita (Ach.) Müll. Arg., Parmelia cetrata Ach., P. latissima Fée, Pertusaria leioplaca (Ach.) DC., P. velata (Turn.) Nyl., Pyrenula aurantiaca Fée = P. cerina Eschw., P. fallaciosa Tuck. = Polyblastiopsis fallaciosa (Stizenb.) Zahlbr., Pyrenula leucoplaca (Wallr.) Körb., P. mamillana (Ach.) Trev., Pyxine cocoes (Sw.) Nyl., Ramalina calicaris (L.) Fr., R. gracilis (Pers.) Nyl., Thelotrema interpositum (Nyl.) Müll. Arg., T. microporum Montague = Ocellularia micropora (Mont.) Müll. Arg., Trypethelium creuentum Montague = Melanotheca cruenta (Mont.) Müll. Arg., T. madreporiforme Eschw. = Laurera madreporiformis (Eschw.) Ridd., T. ocholeucum var. pallescens Mull. = T. pallescens Fée, T. sprenglii Ach. = T. eluteriae Spreng., and Verrucaria virens Nyl. Northrop (1910) further added to the listing of Bahamian lichens with Cladonia floerkeana (Fr.) Flörke, C. gracilis (L.) Willd., Leptogium pulchellum (Ach.) Nyl. = L. corticola (Tayl.) Tuck., L. tremelloides Fr., and Ramalina pusilla Duby = R. minuscula (Nyl.) Nyl. Leptogium tremelloides and Parmelia latissima are possible misidentifications (Hale and Culberson, 1970) while Graphis dumastii, G. radiata, and Ramalina gracilis are also species in question or not currently recognized as species.

An attempt was made to survey the lichen flora of Abaco Island, The Bahamas and review the Bahamian lichen species identified during previous studies. The Abaco collection included species of Arthothelium, Buellia, Cladonia, Graphina, Graphis, Menegazzia, Opegrapha, Parmelia, Phaeographina, Phaeographis,

and Ramalina. According to current nomenclature, previous collections also included specimens of Arthonia, Bombyliospora, Chiodecton, Coccocarpia, Coenogonium, Dimerella, Glyphis, Laurera, Lecanora, Leptogium, Lopadium, Melanotheca, Ocellularia, Pertusaria, Polyblastiopsis, Pyrenula, Pyxine, Thelotrema, Trypethelium, and Verrucaria.

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