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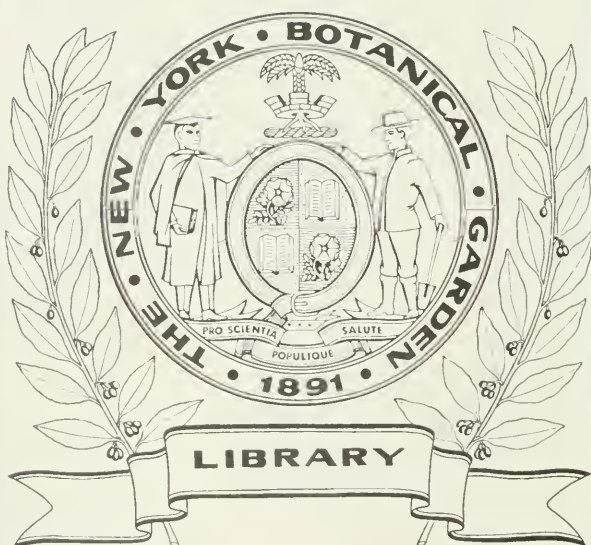
Børgesen, F.

Mosses and Lichens Collected in the former
Danish West Indies.

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DANSK BOTANISK ARKIV

UDGIVET AF

BIND 2 DANSK BOTANISK FORENING

Nr. 9

MOSSES, AND LICHENS
COLLECTED IN THE FORMER
DANISH WEST INDIES

BY

F. BØRGESSEN AND C. RAUNKIÆR



KØBENHAVN

H. HAGERUP'S BOGHANDEL

BIANCO LUNOS BOGTRYKKERI

1918

Mosses and Lichens collected in the former Danish West Indies

By

F. Borgeesen and C. Raunkiær.

In the years 1905-6 we visited the Danish West-Indies, and from that tour dates the greater part of the material which this list contains. As to the rest of the material most of it is due to F. BØRGESSEN's travellings, respectively in 1892-93 and 1895-96. Finally the list contains some specimens collected by EGGERS, O. PAULSEN and C. H. OSTENFELD. The whole of the material is in the Botanical Museum University of Copenhagen.

Our warmest thanks are due to the Professors V. F. BROTHÉRUS and E. WAINIO (Helsingfors), who were kind enough to determine the whole of the material, respectively the mosses and the lichens.

The lichens have been included in WAINIO's "Additamenta ad Lichenographiam Antillarum illustrandam" (Annales Academiae Scientiarum Fennicae. Ser. A. Tom. VI. Helsingforsiae 1915). The names of those species collected by us and mentioned in WAINIO's paper as new are, in the present list, printed in large type. The mosses, on the other hand, have never been published before. Therefore, by the permission of Professor BROTHÉRUS, the new species, there are only two of them, are here accompanied by his descriptions.

The greater part of our collections were chiefly got in St. Jan, the central part of St. Thomas, and the western part of St. Croix. Some of the localities were visited by us together; but, as the chief aim of our investigations in the West-Indies was of a different nature, we had, each of us by himself, opportunities of making collections in places where the other did not go. And, even if we went to the same places it often was at a different time of the year. Still, of course, one must not expect on account

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of this that the flora of mosses and lichens have been even moderately explored. A beginning is made, that is all. This is shown, too, as far as the mosses are concerned, by a comparison of our list of mosses with the one made by ELIZABETH GERTRUDE BRITTON¹, based upon collections in 1913. The two lists contain about the same number of species, Miss Britton's 23, ours 24, all of them collected in the Danish West-Indies; but 9 species only are common to both lists, which shows that not even a fourth part of the collected species are common to both lists, these pointly containing the 38 species of mosses now known in St. Croix, St. Thomas, and St. Jan. Four of these 38 species have, up till now, never been found elsewhere, except in the above-mentioned islands, namely: *Hyophila uliginosa* E. G. Britton, *Phascum sessile* E. G. Britton, *Trichostomum perviride* Brotherus, and *Bryum* (Apalodictyon) *Raunkiaerii* Brotherus.

Even if the number of species of mosses undoubtedly, in the course of time, will increase greatly, the fact remains that the former Danish West-Indies are as deficient in species as they are destitute of areas covered with mosses. Larger patches of ground covered densely with moss are found only on the higher lands, e. g. Makumbo at St. Jan.

The lichenflora is far richer in species, our list containing 156 species, of which 59 are described as new in the above-quoted work of Wainio. All these species have so far, been found only in the Danish West Indies. Many of the new species live on stones and cliffs in places sprayed by the surf, and one of us, Børgesen, had opportunity of making collections here. Most of the species from this locality have never been described before.

¹ ELIZABETH GERTRUDE BRITTON. West-Indian Mosses. II. Mosses of the Danish West Indies and Virgin-Islands. (Bull. of the Torr. Botan. Club 42. 1915.)

I. Mosses

Determined by V. F. Brotherus.

Leucobryaceae.

Octoblepharum albidum (L.) Hedw. St. Thomas: Signalhill (Eggers); St. Jan: America Hill (Raunkiær 340, 350); Esperance (Børgesen); Makumbo (Raunkiær 344).

Fissidentaceae.

Fissidens Kegelianus C. Müll. St. Thomas: St. Peter (Børgesen); Crown (Raunkiær 331).

Calympereaceae.

Syrrhopodon breviligulatus C. Müll. St. Jan: Bordeaux (Raunkiær 358).

Calymperes disciforme C. Müll. St. Croix: Caledonia Valley (Børgesen); St. Thomas (Eggers).

Pottiaceae.

Weisia edentula Sull. St. Croix: Canebay (Børgesen); Kingshill (Raunkiær 334); St. Jan: Foygut (Børgesen); Bordeaux (Børgesen; Raunkiær 343, 372); Rustenborg (Børgesen).

Trichostomum perviride Broth. n. sp. Dioicum; caespitosum, caespitibus densiusculis, rigidis, viridibus, haud nitidis; caulis c. 1.5 cm altus, erectus vel adscendens, infima basi parce fusco-radiculosus, dense foliosus, superne plerumque furcatus; folia sicca circinato-crispula, marginibus involutis, humida patentia, stricta, canaliculato-concava, e basi brevi, ovali late lineari-lanceolata, acutiuscula, saepius hyalino-mucronata, rarius obtusiuscula, mutica, marginibus anguste involutis, integris, nervo crassiusculo, continuo vel breviter excedente, dorso laevi, cellulis minutissimis, subquadratis, papillois, obscuris, basilaribus majoribus, breviter rectangularibus, hyalinis, laevissimis. Caetera ignota.

St. Thomas, Crown, ad terram (Raunkiaer 367).- Species *T. jamaicensi* (Mitt.) Broth. affinis, sed foliorum forma facillime dignoscenda.

Hyophila Tortula (Schwaegr.) Hamp. St. Croix: Canaan (Børgesen); Jolly Hill (Raunkiaer 365, 371).

Barbula hymenostylioides Broth. St. Croix: Crequis (Børgesen).

Barbula Crügeri Sond. var. *laevinervis* Broth. n. var. *Compacte caespitosa*; folia subcucullata, nervo dorso laevi. St. Jan: Hope (Børgesen).

Tortula agraria Sw. St. Croix: Prosperity (Børgesen); Caledonia Valley (Raunkiaer 571); Jolly Hill (Raunkiaer 564); Northside (Børgesen). St. Thomas: Løvenlund (Raunkiaer 563, 568). St. Jan: America Hill (Børgesen, Raunkiaer 376).

Bryaceae.

Bryum (*Apalodictyon*) *Raunkiaerii* Broth. n. sp. Dioicum; caespitosum, caespitibus laxis, faciliter dilabentibus, mollibus, pallide viridibus, haud nitidis; caulis usque ad 2 cm altus, erectus, infima basi parce radiculosus, laxissime foliosus, simplex vel parce ramosus; folia sicca et humida patula, haud decurrentia, cymbiformi-concava, elongate oblonga, obtusa, marginibus erectis, integris vel apice plus minusve distincte obtuse serrulatis, elimbata, nervo tenui, rubello, infra apicem folii evanido, cellulis laxo oblongo-hexagonis, teneris, parce chlorophyllosis, basilaribus elongate rectangularibus. Caetera ignota.

St. Croix, Caledonia, ad rupes pr. cataractam (Raunkiaer 572).

Species pulcherrima, statura robusta, colore folisque remotis, patulis oculo nudo jam dignoscenda.

Bryum Crügeri Hamp. St. Croix: Caledonia Valley (Børgesen).

Bartramiaceae.

Philonotis ligulatula (C. Müll.) Par. St. Thomas: Crown (Raunkiaer 363).

Philonotis tenella (C. Müll.) Besch. St. Thomas: Løvenlund (Raunkiaer 567).

Erpodiaceae.

Erpodium domingense (Spreng.) C. Müll. St. Thomas: Løvenlund Gut (Raunkiaer 366, 368).

Leskeaceae.

Thuidium involvens (Hedw.) Mitt. St. Jan: Debt (Raunkiær 335); Esperance (Raunkiær 348).

Thuidium minutulum (Hedw.) Bryol. eur. St. Jan: Makumbo (Raunkiær 375).

Entodontaceae.

Stereophyllum leucostegium (Brid.) Mitt. St. Thomas: Magensbay (Borgesen).

Hypnaceae.

Microthamnium thelistegum (C. Müll.) Mitt. St. Jan: Makumbo (Raunkiær 347).

Taxithelium planum (Brid.) Mitt. St. Jan: Bordeaux (Raunkiær 339, 345, 351, 354, 364, 576); Debt (Raunkiær 338, 356, 359); Susannaberg (Borgesen); Makumbo (Borgesen; Raunkiær 574, 575); Esperance (Borgesen; Raunkiær 374); America Hill (Raunkiær cfr. *Octoblepharum albidum* 340, 350).

Vesicularia vesicularis (Schwaegr.) Broth. var. *Poepigiana* (Hamp.) Broth. St. Croix: Crequis (Borgesen); Mount Stewart (Borgesen).

Vesicularia leucoclada (Schimp.) Broth. St. Croix: Mount Stewart Gut (Raunkiær 369, 370).

Sematophyllaceae.

Rhaphidostegium caespitosum (Sw.) Jaeg. St. Thomas: St. Peter (Borgesen).

Rhaphidostegium admixtum (Sull.) Broth. St. Jan: Esperance (Borgesen); Debt (Raunkiær 332, 346); Bordeaux (Borgesen); America Hill (Borgesen; Raunkiær 341, 352).

II. Lichens

Determined by **E. Wainio.**

I. Discolichenes.

A. Cyclocarpeae.

Trib. Parmeliace.

Eumitria Antillarum Wain. St. Thomas: Signalhill (Eggers).

Ramalina gracilis (Pers.) Nyl.* *R. Antillarum* Wain.
St. Thomas: Crown (Raunkiær 435); Mt. St. Peter (Børgesen), Highest Ridge (Eggers).

Ramalina complanata (Sw.) Ach. St. Croix: Judith Fancy (Børgesen); St. Thomas: Signalhill (Eggers).

Parmelia (*Amphigymnia*) *peresta* Krempelh. var. *flavo-granulosa* Wain. St. Croix: Mount Stewart (Raunkiær 433).

Parmelia dominicana Wain. St. Thomas: Magensbay Estate (Børgesen), Ma Folie (Biese).

Parmelia crinita Ach. St. Thomas: Signalhill (Eggers), Highest Ridge (Eggers).

Parmelia Sancta Crucis Wain. St. Croix: Fair Plane (Børgesen).

Parmelia latissima Fée. var. *cristifera* (Tayl.) Hue. St. Croix: Mt. Eagle (Børgesen). St. Thomas: Signalhill (Eggers).

Parmelia suberinita Nyl. (Syn. *P. Mauriensis* Hue). St. Thomas: Crown (Eggers) et alibi (Hornbeck, Børgesen).

Parmelia coralloidea (Mey. & Flot.) Wain. St. Thomas: Signalhill (Eggers), Mt. St. Peter (Børgesen), Crown (Raunkiær 415), s. l. (O. Paulsen); St. Jan: Bordeaux (Raunkiær 462, Børgesen).

Parmelia sulphurata Nees et Flot. St. Thomas: s. l. (Ove Paulsen); St. Jan: Makumbo (Raunkiær 442), Bordeaux et prope Susannaberg (Børgesen).

Parmelia (stirps *Cyclocheila*) *tropica* Wain. St. Croix: (Ove Paulsen).

Parmelia martinicana Nyl. St. Croix: Krausses Lagoon (Raunkiær 547); Fair Plane et Judith Fancy (Børgesen).

Parmelia Raunkiæri Wain. St. Croix: Cane Bay (Raunkiær 461); Judith Fancy (Børgesen).

Parmelia granatensis Nyl. St. Croix: Krausses Lagoon (Raunkiær 545).

Parmelia (*Xanthoparmelia*) *lusitana* Nyl. St. Thomas: Crown (Raunkiær 424); St. Jan: Cruz Bay (Børgesen). Var. *deci piens* Wain.; Buck Island pr. St. Thomas (Børgesen); St. Jan: Cruz Bay (Børgesen).

Trib. *Lecanoreae*.

Lecanora subtilissima Wain. St. Jan: Reef Bay (Børgesen).

Lecanora cinereo-carnea (Eschw.) Wain. St. Croix: Sandy Point et Cane Bay (Raunkiær 550, 407); St. Jan: Reef Bay (Børgesen).

Lecanora prosecha Ach. var. *rubescens* Wain. St. Croix: Crequis et Caledonia Valley (Børgesen).

Trib. *Pertusaricæ*.

Pertusaria coccopoda Wain. St. Thomas: Mt. St. Peter (Børgesen); St. Jan: Foygut bay, America Hill (Børgesen).

Pertusaria xanthodes Müll. Arg. var. *biformis* Wain. St. Croix: Cane Bay (Raunkiær 467), Mt. Eagle (Børgesen). Var. *stramineo-albida* Wain. St. Croix: Northside (Børgesen).

Pertusaria simplicata Wain. St. Croix: Cane Bay (Raunkiær 467).

Pertusaria praetervisa Wain. var. *straminea* Wain. St. Croix: Hams Bluff et Via Oxholmia (Børgesen); Cane Bay

(Raunkiær 425, 426); Buck Island (Børgesen). St. Jan: Brynes Bay (Raunkiær 429); Cruz Bay (Børgesen).

Var. **expallescens** Wain. St. Croix: Hams Bluff et Crequis (Børgesen). St. Jan: Cruz Bay (Børgesen).

Var. **pileolata** Wain. St. Croix: Hams Bluff et Salt River et ad Prosperity (Børgesen).

Pertusaria flavens Nyl. St. Croix: s. l. (Ove Paulsen).

Pertusaria glaucopunctata Wain. St. Thomas: Crown (Raunkiær 417).

Trib. Theloschisteae.

Placodium cupuliferum Wain. St. Jan: Reef Bay (Børgesen).

Placodium cinnabarinum (Ach.) Anzi. Buck Island prope St. Thomas (Rüssl.).

Placodium subfulgescens (Nyl.) Wain. f. *dispersa* Wain. St. Croix: Caledonia valley (Børgesen); St. Thomas: Magensbay Estate (Børgesen); St. Jan: America Hill (Børgesen).

Placodium aurantiacum (Lightf.) Tuck. *Pl. *Bassiae* (Willd.) Wain. St. Thomas: Crown (Raunkiær 422).

Placodium ferrugineum (Huds.) Hepp. var. *caesiorufa* (Nyl.) Wain. St. Jan: Reef Bay et Foygut Bay, America Hill (Børgesen).

Placodium leptozonum (Nyl.) Wain. St. Jan: Reef Bay (Børgesen).

Placodium Boergesenii Wain. var. **squamoso-areolata** Wain. St. Thomas: Magensbay (Børgesen); St. Jan: Reef Bay (Børgesen).

Var. **leptozonoides** Wain. St. Croix: Salt River (Børgesen).

Placodium janinum Wain. St. Jan: Kebay (Børgesen).

Placodium agratum Wain. St. Croix: Hams Bluff et Via Oxholmia (Børgesen).

Placodium diplacioides Wain. St. Croix: Crequis, Mt. Eagle (Børgesen); St. Thomas: Løvenlund (Raunkiær 413); Ma Folie (Biese); St. Jan: Kebay, Esperance et Reef Bay (Børgesen).

Placodium diplacium (Ach.) Wain. var. *carneofusca* (Nyl.) Wain. St. Croix: Caledonia valley et Crequis (Børgesen); St. Thomas: Løvenlund (Raunkiær 405); St. Jan: Esperance, Kebay et Reef Bay (Børgesen).

Var. *phaea* (Tuck.) Wain. St. Croix: Crequis, Caledonia valley et Hams Bluff (Børgesen); St. Thomas: Crown (Raunkiær 411), Magensbay Estate (Børgesen), St. Peter (Børgesen); St. Jan: Sussannaberg (Børgesen).

Var. *verrucosa* Wain. St. Thomas: Magensbay Estate (Børgesen); St. Jan: Cruz Bay (Børgesen).

Var. *lecideoides* Wain. St. Croix: Cane Bay (Raunkiær 427), Via Oxholmi et Prosperity (Børgesen); St. Thomas: Magensbay Estate (Børgesen); Buck Island prope St. Thomas. Transiens in var. *verrucosam*; St. Thomas: Magensbay Estate (Børgesen); in var. *phaeam* transiens; St. Croix: Prosperity (Børgesen).

Var. *deminuta* Wain. St. Thomas: Magensbay Estate (Børgesen).

Trib. *Buellieae*.

Anaptychia granulifera (Ach.) Wain. var. *farinulenta* Wain. St. Thomas: Signalhill (Eggers).

Physcia callosa Nyl. var. *macra* Wain. St. Jan: Cruz Bay (Børgesen).

Physcia integrata Nyl. var. *obsessa* (Mont.) Wain. f. *psathyra* (Tuck.) Wain. St. Jan: Cruz Bay (Børgesen).

Var. *sorediosa* Wain. f. *tristis* Wain. St. Croix: Crequis (Børgesen); St. Thomas: Crown (Raunkiær 402), Magensbay Estate (Børgesen); St. Jan: Reef Bay (Børgesen), Coral Bay (Raunkiær 453); f. *pallescens* Wain. St. Croix: Fair Plane (Børgesen).

Physcia crispa (Pers.) Nyl. var. *mollescens* (Nyl.) Wain. St. Croix: Cane Bay (Børgesen); St. Thomas: Løvenlund (Raunkiær 410, 431), Magensbay Estate (Børgesen), Signalhill

(Eggers); St. Jan: Cruz Bay (Raunkiær 554, 556), Reef Bay Makumbo, Susannaberg (Børgesen). f. *melanophthalma* Wain. St. Thomas: Løvenlund (Raunkiær 541).

Physcia minor (Fée) Wain. St. Croix: Northside (Børgesen).

Physcia adglutinata (Floerk.) Nyl. St. Croix: Cane Bay (Raunkiær 406).

Physcia picta (Sw.) Nyl. St. Croix: Northside (Børgesen) et alibi (Ove Paulsen); St. Thomas: Crown (Raunkiær); St. Jan: Cruz Bay.

Ph. picta (Sw.) Nyl. f. *prunifera* Wain. St. Croix: Northside (Børgesen); St. Jan: Cruz Bay (Børgesen).

Ph. picta (Sw.) Nyl. f. *lavata* Wain. St. Croix: s. l. (Ove Paulsen).

Physcia purpurascens Wain. St. Croix: Krausses Lagoon (Raunkiær 542), Fair Plane (Børgesen).

Pyxine Meissneri Tuck. var. *genuina* Malme. St. Croix: Fair Plane (Raunkiær 548), Jolly Hill (Raunkiær 436), Krausses Lagoon (Raunkiær 546), Hams Bluff et Cane Bay (Børgesen), s. l. (Ove Paulsen).

Var. *rinodinoides* Wain. St. Jan: Coral Bay (Caroline) (Raunkiær 443).

Pyxine connectens Wain. St. Croix: Cane Bay (Raunkiær 406).

Pyxine dissecta (Fée) Wain. St. Croix: Northside (Børgesen), Cane Bay (Raunkiær 406).

Pyxine heterospora Wain. St. Thomas: Løvenlund (f. *rugulosa* Wain., Raunkiær 409), Crown (Raunkiær 420); St. Jan: Cruz Bay et Reef Bay (Børgesen).

Pyxine obscurascens Malme. St. Thomas: St. Peter (Børgesen).

Rinodina pyxinoides Wain. St. Jan: Cruz Bay (Børgesen).

Rinodina Boergesenii Wain. St. Croix: Hams Bluff (Børgesen).

Rinodina Antillarum Wain. St. Thomas: Magensbay Estate (Børgesen).

Rinodina intrusa (Krempelh.) Malme. var. *leioplaca* (Müll. Arg.) Malme. St. Jan: Reef Bay (Børgesen).

Melanospicilia contiguella Wain. St. Thomas: Magensbay Estate (Børgesen).

Var. *vegetior* Wain. St. Thomas: Magensbay Estate (Børgesen).

Buellia dejungens Nyl. var. *chrysophaea* Wain. St. Croix: Hams Bluff et Mt. Eagle (Børgesen); St. Thomas: Magensbay Estate (Børgesen).

Var. *chrysochlora* Wain. St. Croix: Caledonia Valley (Børgesen); St. Jan: Makumbo et Esperance (Børgesen).

Var. *chrysochroa* Wain. St. Croix: Mt. Eagle (Børgesen); St. Thomas: Løvenlund (Raunkiær 404); St. Jan: Rustenburg (Børgesen).

Buellia endochrysea Wain. St. Thomas: Magensbay Estate (Børgesen).

Buellia trachyspora Wain. St. Jan: Reef Bay (Børgesen).

Buellia gyrosa Wain. St. Jan: Rustenburg (Børgesen).

Buellia poliocheila Wain. St. Thomas: Ma Folie (Biese), Magensbay Estate (Børgesen); St. Jan: Cruz Bay (Børgesen).

Buellia parachroa Wain. var. *interrupta* Wain. St. Thomas: Magensbay (Børgesen).

Buellia pachydermatica Wain. St. Thomas: Ma Folie (Biese).

Buellia conspirans Nyl. St. Jan: Cruz Bay (Børgesen).

Buellia modesta (Krempelh.) Müll. Arg. St. Croix: Fair Plane (Borgesen), Krausses Lagoon (Raunkiær 542); St. Thomas: Crown (Raunkiær 419).

Buellia Lauricassiae (Fée) Wain. St. Croix: Jolly Hill (Raunkiær 436); St. Thomas: s. l. (Borgesen).

Buellia polyspora (Willey) Wain. var. *diminutiva* Wain. St. Croix: Cane Bay (Raunkiær 467).

Buellia pachyphragma Wain. St. Jan: Reef Bay (Borgesen).

Buellia orcularia Wain. St. Thomas: Magensbay (Borgesen); St. Jan: Cruz Bay (Borgesen).

Trib. Pannarieae.

Coccocarpia pellita (Ach.) Wain. var. *parmelioides* (Hook.) Müll. Arg. St. Jan: Esperance et Cruz Bay (Borgesen).

Coccocarpia cronia (Tuck.) Wain. var. *isidiophylla* (Müll. Arg.) Wain. St. Jan: s. l. (Ove Paulsen).

Var. *isidiosa* (Müll. Arg.) Wain. St. Thomas: St. Peter (Borgesen); St. Jan: Susannaberg (Borgesen).

Trib. Heppieae.

Heppia Bolanderi (Tuck.) Wain. St. Jan: Cruz Bay (Borgesen).

Leptogium moluccanum (Pers.) Wain. St. Jan: Makumbo (Raunkiær 428, 441).

Leptogium caesium (Ach.) Wain. St. Jan: Esperance (Borgesen).

Leptogium marginellum (Sw.) Mont. St. Thomas: St. Peter (Borgesen).

Leptogium coralloideum (Mey. et Flot.) Wain. St. Jan: Makumbo (Raunkiær et Borgesen).

Collema (sect. *Blennothallia*) **acarosporoides** Wain. Buck Island near St. Croix (Børgesen).

Synalissa lichinella Wain. St. Jan: Cruz Bay (Børgesen).

Pyrenopsis Antillarum Wain. St. Thomas: Magensbay Estate (Børgesen); St. Jan: Cruz Bay (Børgesen).

Pyrenopsis negans Wain. St. Jan: Cruz Bay (Børgesen).

Psorotichia aspicilioides Wain. St. Croix: Crequis (Raunkiær 432).

Psorotichia americana Wain. var. *pallescent* Wain. St. Jan: America Hill (Børgesen).

Psorotichia Boergesenii Wain. St. Thomas: Magensbay (Børgesen).

Trib. **Lecideae.**

Cladonia fimbriata (L.) Fr. f. *subulata* (L.) Wain. St. Croix: Mt. Eagle (Børgesen). f. *radiata* (Schreb.) Coem. Wain. parce cum praecedente (Mt. Eagle).

Cladonia pityrea (Floerk.) Fr. f. *sorediosa* Wain. St. Croix: Mt. Stewart (Raunkiær 430).

Lecidea medialis Tuck. Wain. St. Croix: Cane Bay, Mt. Eagle (Børgesen); St. Jan: Makumbo (Børgesen).

Lecidea subvelutina Wain. St. Jan: Debt (Raunkiær, 558, 559, 560).

Lecidea (*Biatorina*) **trifera** Wain. St. Croix: Jolly Hill (Raunkiær 440).

Lecidea (*Biatora*) **janina** Wain. St. Jan: Macumbo (Børgesen).

Lecidea piperis (Spreng.) Nyl. f. *erythroplaca* (Fée) Krempelh. St. Jan: Makumbo (Børgesen); f. *circumtincta* Nyl. St. Jan: Debt (Raunkiær 454).

Trib. *Gyalecteeae*.

Gyalecta lutea (Dicks.) Tuck. St. Jan: Caroline (Raunkiær 464).

Trib. *Diploschisteae*.

Diploschistes actinostoma (Pers.) Zahlbr. St. Croix: Mt. Eagle (Borgesen); St. Thomas: Magensbay Estate (Borgesen); St. Jan: Cruz Bay (Borgesen).

Trib. *Thelotremeae*.

Thelotrema rhodothecium Wain. St. Jan: Debt (Raunkiær 403).

Thelotrema compunctum (Sw.) Nyl. var. *Antillarum* Wain. St. Croix: s. l. (Ove Paulsen); St. Jan: Cruz Bay (Raunkiær 553).

Thelotrema aquilinum Wain. St. Croix: Mt. Eagle (Borgesen).

Gyrostomum scyphuliferum (Ach.) Fr. St. Thomas: Crown (Raunkiær 412); St. Jan: Reef Bay (Borgesen), Coral Bay (Raunkiær 449, 451), Boreks Creek (Raunkiær 544).

Trib. *Lecanactideae*.

Lecanactis (Basidiactis) *denticulata* Wain. St. Croix: Krausses Lagoon (Raunkiær 546); St. Thomas: s. l. (Borgesen).

Lecanactis dryina (Ach.) Wain. St. Croix: Fair Plane (Borgesen), Krausses Lagoon (Raunkiær 546).

B. Hysterieae.

Trib. 1. **Graphideae.**

Graphis acuminata Wain. St. Jan: Esperance (Raunkiær 437).

Graphis virginea (Eschw.) Nyl. St. Jan: Bordeaux (Raunkiær 456), Debt (Raunkiær 403).

Graphis collospora Wain. St. Croix: Mt. Eagle (Børgesen).

Graphis punctiformis (Eschw.) Nyl. St. Thomas: Crown (Raunkiær 417).

Graphis arthonioides Wain. St. Croix: Krausses Lagoon (Raunkiær 546), Fair Plane (Raunkiær 548).

Graphis trichosa Ach. St. Jan: Debt (Raunkiær 455).

Graphis tenella Ach. var. *epiphaea* Wain. St. Croix: Cane Bay (Raunkiær 408), Hams Bluff (Børgesen); St. Jan: Coral Bay (Raunkiær 452), Cruz Bay (Raunkiær 557).

Graphis Afzelii Ach. St. Jan: Debt (Raunkiær 466).

Graphis atroalba Krempelh. St. Jan: Debt (Raunkiær 458).

Graphis (sect. *Anomographe*) **coriacea** Wain. St. Croix: Caledonia Valley (Børgesen).

Graphis (sect. *Glyphis*) **cicatricosa** (Ach.) Wain. var. *simplicior* Wain. St. Thomas: Crown (Raunkiær 416); St. Jan: Coral Bay (Raunkiær 447).

Var. *confluens* (Zenk.) Wain. St. Jan: Coral Bay (Raunkiær 447).

Opegrapha (subg. *Euopegrapha*) **cylindrica** Raddi. St. Thomas: Mesgin Estate (Børgesen).

Opegrapha obvelata Wain. St. Croix: Little Princess (Ove Paulsen).

Opegrapha interalbata Nyl. St. Jan: Cruz Bay (Raunkiær 555).

Opegrapha brachycarpoides Wain. St. Croix: Kingshill et Little Princess (Borgesen).

Chiodecton (Enterographa) *substellatum* Wain. St. Croix: Mt. Eagle (Borgesen).

Chiodecton endorhodum Wain. St. Jan: Debt (Raunkjær 403).

Chiodecton sanguineum (Sw.) Wain. St. Jan: Cruz Bay (Raunkjær 553).

Chiodecton (Mazosia) *granulare* (Müll. Arg.) Wain. St. Jan: Debt (Raunkjær 559, 560).

Arthonia nebulosa (Müll. Arg.) Willey. St. Jan: Borecks Creek (Raunkjær 544).

Arthonia lignicola Wain. St. Jan: Bordeaux (Raunkjær 459).

Arthonia americana Wain. St. Jan: Bordeaux (Raunkjær 438).

Arthonia substellata (Ach.) Nyl. St. Croix: Little Princess (Ove Paulsen and Borgesen), Sandy Point (Raunkjær 551).

Arthonia minuta Wain. St. Croix: Little Princess (Ove Paulsen).

Arthonia aquilina Wain. St. Croix: Mt. Eagle (Borgesen).

Arthonia platyspilea Nyl. St. Croix: Cane Bay (Borgesen); St. Thomas: s. l. (Borgesen).

Arthonia perpallens Nyl. St. Croix: Mt. Eagle (Borgesen).

Arthonia subrubella Nyl. In insulis Danicis Indiae Occidentalis 1905—06 (Borgesen).

Arthonia rubella (Fée) Nyl. St. Thomas: Northside Bay (Borgesen), Crown (Raunkjær 418).

Arthonia gregaria (Weig.) Koerb. var. *tumidula* Almq. St. Jan: Bordeaux (Raunkjær 459).

Naevia subvelutina Wain. St. Jan: Debt (Raunkjær 559).

II. Pyrenolichenes.

Verrucaria aethioboliza Nyl. St. Croix: Crequis (Borgesen).

Parmentaria astroidea Fée. St. Croix: Mt. Eagle (Borgesen).

Thelenella (Microglæna) brasiliensis (Müll. Arg.) Wain. St. Thomas: Magensbay Estate (Borgesen); St. Jan: Reef Bay (Borgesen).

* *Bottaria ochraceoflavens* (Nyl.) Wain. St. Croix: Fair Plane (Borgesen); St. Jan: Coral Bay (Raunkiær 448, 450).

Bottaria libricola (Fée) Wain. St. Croix: Krausses Lagoon (Raunkiær 543).

Pyrenula glabrescens Wain. St. Croix: Mt. Eagle (Borgesen).

Pyrenula laevigata Pers. var. *microspora* Wain. St. Croix: Little Princess (Ove Paulsen); St. Jan: Makumbo (Borgesen).

Pyrenula cerina (Eschw.) Müll. Arg. St. Croix: Krausses Lagoon (Raunkiær 543), Sandy Point (Raunkiær 549), Salt River (Borgesen), s. l. (Ove Paulsen).

Pyrenula circumfiniens Wain. St. Thomas: Crown (Raunkiær 401).

Porina (Segestria) rudiusecula (Nyl.) Wain. var. *granulatula* (Nyl.) Wain. St. Jan: Makumbo (Borgesen). Var. *tetraspora* Wain. St. Jan: Debt (Raunkiær 403).

Porina (Segestria) nucula Ach. var. *nucalis* Wain. St. Croix: Mt. Eagle (Borgesen); St. Jan: Makumbo (Borgesen).

Porina (Segestria) isidiophora Wain. St. Thomas: Crown (Raunkiær 401); St. Jan: Debt (Raunkiær 454), Bordeaux Hill (Raunkiær 439).

Porina (Segestria) Tetracerae (Ach.) Müll. Arg. St. Jan: Bordeaux Hill (Raunkiær 439).

Porina (Sagedia) **glaucopallida** Wain. St. Jan: Makumbo (Børgesen).

Porina (Sagedia) **buellioides** Wain. St. Jan: Kebay et Susanna-berg (Børgesen).

Porina (Sagedia) **Bucidae** Wain. St. Thomas: Mesgin Estate (Børgesen).

Porina (Sagedia) **crequisina** Wain. St. Croix: Crequis (Børgesen).

Strigula (Melanothele) **argentea** (Fée) Wain. St. Croix: Caledonia valley (Børgesen).

Strigula elegans (Fée) Müll. Arg. St. Croix: Caledonia valley (Børgesen).

Arthopyrenia Antillarum Wain. St. Jan: Makumbo (Børgesen).

Arthopyrenia insularis Wain. Ad corticem arboris in Insulis Danicis Indiae occidentalis (Børgesen annis 1905—1906:).

Arthopyrenia subinsularis Wain. St. Croix: Mt. Eagle (Børgesen).

Didymella Cinchonae (Ach.) Wain. St. Thomas: s. l. (39: H. F. A. Eggers).

Microthelia leucothallina Wain. In Insulis Danicis Indiae occidentalis (Børgesen annis 1905—06).

Didymosphaeria detincta (Nyl.) Wain. St. Jan: Reef Bay (Børgesen).

Lichenes imperfecti.

Lepraria xanthina Wain. St. Croix: Belvédère (Børgesen), Mt. Stewart (Raunkiær 444).

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