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THE FLORA OF THE AMERICAN  
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N. L. BRITTON

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## THE FLORA OF THE AMERICAN VIRGIN ISLANDS

N. L. BRITTON

*New York Botanical Garden*

The islands St. Thomas, St. Jan and St. Croix recently purchased by the United States from the kingdom of Denmark, are situated to the east and southeast of the island of Porto Rico. My interest in their flora was first aroused by the proximity of the Virgin Islands archipelago to Porto Rico, both the Porto Rican islands Culebra and Vieques being parts of the archipelago. I therefore took occasion in 1913, accompanied by Dr. J. N. Rose and with the help of Mrs. Britton, Miss Delia W. Marble, and Dr. J. A. Shafer, to explore St. Thomas and St. Jan quite thoroughly, and Dr. Rose made collections on St. Croix, while we were engaged in studying the cacti of the West Indies.<sup>1</sup> In 1901, I had made a brief visit to St. Croix, with Mr. John F. Cowell.<sup>2</sup>

The islands are all hilly, there being very little level land on either St. Thomas or St. Jan, but more on St. Croix. The rocks are mostly of plutonic origin, but there is some limestone on St. Croix and locally other stratified rocks occur. The highest elevation is about 500 meters (1,550 feet), on The Crown of St. Thomas.

There is but little natural forest remaining on any of the islands, and what there is is confined to the hilltops in a few places. Re-forestation is the crying need of the new possession, and it will be highly discreditable to the United States if this subject is not immediately taken in hand. Most of the higher parts of all three islands are not available for any but forest products and the supply of wood for fuel needs to be increased and the rainfall conserved by a forest cover, for most of the rain now runs off immediately. This destruction of the forest has doubtless eliminated a good many species from the original flora of the islands.

The principal literature of the botany of the islands is as follows:<sup>3</sup>

- H. West. "Bidrag til Beskrivelse over Ste Croix, med en kort udsigt over St. Thomas, St. Jean, Tortola, Spanishtown og Crabeneiland." Kiöbenhavn. Pp. 363. 1793. [German edition pp. 274, Copenhagen 1794.]

West enumerates and partly describes 542 species, of which 111 were culti-

<sup>1</sup> Jour. N. Y. Bot. Gard. 14: 99-109.

<sup>2</sup> Jour. N. Y. Bot. Gard. 2: 166.

<sup>3</sup> See also citations in the chapters on Hepaticae, Fungi and Algae.

vated, mainly of St. Croix, a few from St. Thomas and St. Jan. Some of the descriptions are by Vahl. A number of the plants listed have not been observed on St. Croix by subsequent collectors and some of them are obscure. The author was rector of a school at Christiansted. The book is very rare. I am indebted to The New York Public Library for a photostat copy.

**André Pierre Ledru.** "Voyage aux îles de Ténériffe, La Trinité, Saint-Thomas, Sainte Croix et Porto Ricco, exécuté par ordre du gouvernement français, depuis le 30 septembre 1796 jusqu'au 7 juin 1798, sous la direction du capitaine Baudin, pour faire des recherches et des collections relatives à l'histoire naturelle; contenant des observations sur le climat, le sol, la population, l'agriculture, les productions de ces îles, le caractère, les mœurs et le commerce de leurs habitants." Ouvrage accompagné de notes et d'additions par M. Sonnini. Avec une très belle carte gravée par J. B. Tardieu d'après Lopez. Paris. 2 vol. 1810.

Ledru was the botanist and Anselme Riedlé the gardener of an expedition sent out by the Paris Museum of Natural History 1796-1798. Unfortunately, many of the specimens attributed to St. Thomas were in all probability collected on Porto Rico. Many living plants were brought back to the Jardin des Plantes. The botanical parts of the report are general and not extensive.

**D. F. L. de Schlechtendal.** "Florula insulae Sti. Thomae Indiae occidentalis." *Linnaea*, 3: 251-276; 4: 78-93; 5: 177-200, 682-688; 6: 722-772. 1828-1831.

About 400 species are enumerated. The plants were collected by C. A. Ehrenberg, a merchant, in the years 1827 and 1828. The records are annotated and there are some descriptions.

**Henry Krebs.** "Catalogue of plants found on the island of St. Thomas, W. I." 1852. [In John P. Knox: A historical account of St. Thomas, W. I., with its rise and progress in commerce, missions and churches, climate and its adaptation to invalids, geological structure, natural history and botany. New York.]

Over 1,200 plants are enumerated alphabetically, including many in cultivation and some algae. Many of the records can not now be substantiated. Krebs had previously published an account of the geographic distribution of the Flora of St. Thomas.

**J. P. Knox.** "Catalogue des plantes qui naissent spontanément dans l'isle de Saint-Thomas." 1857. [Memorie della r. Acad. di Torino, II, 16: lxxvi-lxxxix.]

This is essentially the same document as the preceding.

**H. F. A. Eggers.** "St. Croix's Flora." *Vidensk. Meddel. Kjøbenhavn*. Pp. 33-158. 1876.

Baron Eggers was a Danish official on St. Croix from 1869 to 1874, and made extensive botanical collections. He records 738 species, with annotations.

**H. F. A. Eggers.** "Flora of St. Croix and the Virgin Islands, West Indies." *Bull. U. S. Nat. Mus.* 13. Pp. 133. 1879.

Baron Eggers was in command of Danish troops on St. Thomas during most of the period between 1874 and 1887, and visited St. Jan. In this catalogue he enumerates 881 indigenous or naturalized species, with annotations, and also records many of the plants in cultivation.

**H. F. A. Eggers.** "Supplement til St. Croix's og Jomfruøernes Flora." *Vidensk. Meddel. Kjøbenhavn*, pp. 11-21. 1889.

This work contains additional records to those previously published by the author.



**Otto Kuntze.** "Um die Erde." Pp. 514. Leipzig. 1881.

Dr. Kuntze visited St. Thomas in 1874, at the beginning of his extensive travels.

**Otto Kuntze.** "Revisio Generum Plantarum" 1: 2: pp. 1009. Leipzig. 1891.

The author records specimens collected by him on St. Thomas in 1874.

**F. Borgeesen and Ove Paulsen.** "Om Vegetationen paa de Dansk-Vestindiske Oer."

Botan. Tidsskr. Kjøbenhavn, 22: 1-114, f. 1-43. 1898. [Reprint pp. 114.]

Mr. Borgeesen visited the islands in 1892, and again in 1895-6, on his second trip accompanied by Mr. Paulsen. They made extensive collections, and listed six Spermatophytes as additions to the known flora. The document is mostly ecologic, and especially detailed as to the composition of the coastal vegetation. It was translated into French by Mlle. S. Eriksson and published in 1900 (Rev. Gen. de Bot. 12: 99-107; 138-153; 224-245; 289-297; 344-354; 434-446; 489-510). [Reprint pp. 108.]

**C. F. Millspaugh.** "Plantae Utowanae." Field Col. Mus. Bot. 2: 1-110; 113-135. pl. 25. 1900.

During the cruise of the yacht *Utowana*, December, 1898, to March, 1899, Dr. Millspaugh, botanist of the expedition, visited St. Thomas on January 17 and 18, 1899, and collected about 200 species, which are enumerated.

**C. F. Millspaugh.** "Flora of the Island of St. Croix." Field Col. Mus. Bot. 1: 441-546. Map. 1902.

Annotated list of 1,029 species, based especially upon the large collections made in 1895, 1896 and 1897 by A. E. Ricksecker and Mrs. J. J. Ricksecker, with records taken from Baron Eggers Flora. Mr. Ricksecker published a list of the species collected by him, pp. 4, not dated [1896]. Dr. Millspaugh has a chapter upon the botanical history of St. Croix.

**F. Borgeesen.** "Notes on the Shore Vegetation of the Danish West Indian Islands." Bot. Tidsskr. 29: 201-259. f. 1-140; pl. 3-6. 1909.

\* Mr. Borgeesen made a third trip to the islands during the winter of 1905-1906, especially for algological studies. The paper is ecological, and supplementary to his earlier publications.

**E. G. Britton.** "Mosses of the Danish West Indies and Virgin Islands." Bull. Torr. Club 42: 1-8. 1915.

Mrs. Britton lists, with annotations, 28 species of Mosses, including 3 described as new; four of the plants enumerated were found only on Tortola.

**H. G. Brock, P. S. Smith, W. A. Tucker.** "The Danish West Indies, their Resources and Commercial Importance." 1917.

The United States Department of Commerce has recently published as Special Agents Series 129 (pp. 68, figs. 1-8), a valuable document in which the vegetable products of commercial value are discussed.

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There are a very large number of records of plants from the islands in taxonomic monographs and lists of species by many authors.

As a literary curiosity record may be made of a manuscript list of the plants of St. Thomas, undated, arranged upon the Linnaean system of classification, preserved in the library of the New York Botanical Garden, presented some years ago by the late Dr. T. F. Allen.

General comments upon the vegetation are to be found in several books of travel.

The earlier collections of botanical specimens are practically all to be found only in the herbaria of the Old World. Perhaps the oldest

are those of Von Rohr and of Ryan, made about 1780, and preserved for the most part in the herbarium of the Botanical Museum at Copenhagen, where the most complete and extensive collections from these islands are to be found.

Prior to 1800 collections were made by L. C. M. Richard, Isert, West, Pflug, Ledru and Riedlé. During the nineteenth century the principal collectors were Benzon, Bertero, Ravn, Hornbeck, Ehrenberg, Breutel, Krebs, Oersted, Holton, Eggers, Krause, Warming, Borgeesen, Paulsen, A. E. Ricksecker, Mrs. J. J. Ricksecker, Otto Kuntze and Millspaugh. Since 1900 collections have been made by N. L. Britton, Mrs. Britton, J. F. Cowell, Miss Marble, J. A. Shafer and J. N. Rose.

A collection made by Kirkman Finley in Trinidad was erroneously labeled as from St. Thomas, and many errors have been made in citing these specimens. A few plants collected by Kuntze in Porto Rico have been erroneously recorded as from St. Thomas, and many collected by Riedlé on Porto Rico have been similarly erroneously recorded. Conversely, some plants collected by Purdie on St. Thomas have been cited as Jamaican.

For the purposes of the following list of plants I have examined the literature and have studied the following series of specimens:

1. Duplicates of plants collected by Benzon, Hornbeck, Eggers and Paulsen, received by the New York Botanical Garden in exchange with the Copenhagen Botanical Museum.

2. The collection made by I. F. Holton on St. Thomas, preserved in the herbarium of Columbia University.

3. Dr. Otto Kuntze's St. Thomas plants, which came to the New York Botanical Garden as a part of his herbarium, presented by Mr. Andrew Carnegie.

4. The St. Croix collections made by Mr. Ricksecker and a portion of that made by Mrs. Ricksecker in the herbarium of the New York Botanical Garden and parts of the complete sets preserved in the herbarium of The Field Museum of Natural History.

5. Part of the St. Thomas collection made by Dr. Millspaugh.

6. The St. Croix collection made by Mr. Cowell and myself in 1900.

7. The collections made by Dr. Rose, assisted by Mr. Fitch and Mr. Russell on St. Croix in 1913.

8. The collection made on St. Thomas by Mrs. Britton and Miss Marble in 1913.

9. The collection made by Dr. Shafer and myself on St. Thomas, St. Jan and small adjacent islands in 1913.

Mrs. Britton has contributed the catalogue of the mosses, Dr. Evans that of the hepatics, and Professor Riddle that of the lichens.

Our knowledge of the fungi of the islands is but fragmentary and it is therefore deemed wise not to attempt an enumeration of them at this time; a mycological survey would doubtless reveal the presence of several hundred species. Dr. Howe has contributed a note on the algological collections and researches of Mr. Borgesen.

St. Thomas and St. Jan are two of the Virgin Islands, discovered by Columbus in 1493, and were so called to commemorate the young women who are fabled as having accompanied St. Ursula.

The Virgin Island group is usually regarded as composed of the following islands, proceeding from the west eastward, (1) Culebra, or Snake Island (Porto Rican); (2) St. Thomas, or San Thomé, and (3) St. John or San Jan; (4) Tortola, (5) Virgin Gorda, and (6) Anagada (British). Throughout this archipelago there are many islets and keys, and the marine views from the hills are among the most charming in America. If to the above mentioned larger islands we add (7) Jost Van Dyck, the next largest, a British island near Tortola, we have seven major Virgin Islands, eight if we include Vieques.

Tortola (British) is separated from St. Jan by little over a mile of water. The purchase from the Danish government thus brings our frontier close to that of the British Empire at another point.

Vieques, or Crab Island (Porto Rican), lies south of the axis of the archipelago, and is perhaps not properly a member of the Virgin Island group, although it is sometimes so considered.

These islands were originally inhabited by Arawak and Carib Indians. St. Thomas was colonized by the Dutch in 1657, passed to the British about 1667, and to the Danes in 1671, who have since held it, except for short occupations by the British. St. Jan was colonized by the Danes in 1684, and their occupancy has since been continuous. St. Croix, or Santa Cruz, was also discovered by Columbus in 1493 or early in 1494, colonized by both Dutch and English in 1625, passed soon to the Spanish, and next to the French in 1651. The Danish ownership dates from 1733. It is isolated in the sea, and not properly of the Virgin Island group; in clear weather, it can be seen from the hills of Porto Rico and from those of St. Thomas and St. Jan.

All three islands are oblong in shape, with the longer axes nearly east and west, the coast lines irregular. The hills of St. Thomas rise to about 1,500 feet; those of St. Jan are somewhat lower (about 1,260 feet), while the highest point on St. Croix (Mt. Eagle) is 1,164 feet. St. Croix is about 21 miles long, 6 miles wide, and has an area of about 84 square miles, being thus about one seventh larger than Staten Island, New York ( $72\frac{1}{2}$  square miles). St. Thomas is 13 miles long, 4 miles wide, with an area, including its islets, of some 32 square miles; St. Jan is 9 miles long, about 5 miles wide, with an area, in-

cluding its islets, of about 21 square miles. The total area of the three islands, including their contiguous islets, is thus about 138 square miles, or not quite twice that of Staten Island. The areas here used for St. Thomas and St. Jan are approximate, because the total area of the contiguous islets is not definitely recorded.

The harbor of Charlotte Amalia, coveted by commercial and naval interests, is the most striking coastal feature of the islands, indenting the southern coast of St. Thomas. It is something less than a mile in diameter, a little longer than wide, and is nearly enclosed by the hills, its mouth being approximately 900 feet wide. It is as safe an anchorage as any tropical harbor can be, and affords anchorage for as many vessels as would be at all likely to need it at any one time, in water which is up to 37 feet deep. It is not as spacious as Guantanamo Bay on the southeast coast of Cuba, but as a naval base, with the hills fortified, would immediately command the Virgin Passage.

Magen's Bay on the north side of St. Thomas, where a long peninsula juts out into the sea, and Coral Bay at the east and Cruz Bay at the west end of St. Jan, are also valuable harbors, and there are several other small harbors or coves. The so-called harbors at Christiansted and Frederiksted, St. Croix, are open roadsteads.

These islands, like Culebra, Tortola, and Virgin Gorda, are partly plutonic in origin, being partly composed of rocks which have solidified from a molten state. There is no present evidence of volcanic activity, as there is in the Leeward and the Windward Islands farther south, and there are no volcanic peaks. Conglomerate and other stratified rocks, supposed to be Cretaceous, also occur. They are evidently ancient, and show evidences of an enormous amount of erosion since their upheaval; they have not been geologically surveyed.

The soil, except that of some sand beaches and mangrove swamps and salt marshes, has directly resulted from the decay and erosion of the rocks; it is of good agricultural quality and locally deep, but on the steep slopes and hillsides it is meager, having been much washed away since the cutting away of the forests. There are not many sand beaches on St. Thomas or St. Jan, but there is a considerable area of beach on St. Croix. In sheltered coves and reaches with shallow water, the mangrove is forming land, as everywhere in similar situations on tropical coasts.

Along large portions of the coast lines, the rocks come directly to the sea, forming fine cliffs and headlands, often rising from deep water, and much of the coastal scenery is highly picturesque.

I have included records of the plants commonly cultivated either for their products or for ornament and interest, but have made no attempt to include the rarer or unusual garden plants. If the records

by Krebs and Knox are correct, there was a greater variety of plants in gardens at the middle of the last century than at present.

In citing synonyms for the names of plants, I have given the original in cases where the species was first named in a genus other than the one in which it is now included, and I also have indicated the names used by previous authors dealing with plants of the islands, in so far as I have been able to refer them, but no attempt has been made to give complete synonymy.

I gratefully acknowledge aid from Mr. A. S. Hitchcock in the determination of some grasses and from Miss Margaret Slosson and Mr. W. R. Maxon for information regarding some ferns.

## SPERMATOPHYTA

### TYPHACEAE

*TYPHA ANGUSTIFOLIA* L. [*T. domingensis* Pers.; *T. angustifolia domingensis* Griseb.] Along rivulets and lagoons, St. Thomas; St. Jan; St. Croix.

### PANDANACEAE

*PANDANUS UTILIS* Bory. [*P. odoratissimus* of Eggers.] Planted for ornament.

### ZANNICHELLIACEAE

*RUPPIA MARITIMA* L. [*R. rostellata* of Eggers.] Shallow, brackish water, St. Thomas; Buck Island; St. Jan; St. Croix.

### CYMODOCEACEAE

*CYMODOCEA MANATORUM* Aschers. Shallow, salt water, St. Croix; St. Thomas; St. Jan.

*HALODULE WRIGHTII* Aschers. Shallow, salt water, St. Thomas; St. Croix.

### ALISMACEAE

*ECHINODORUS CORDIFOLIUS* (L.) Griseb. [*Alisma cordifolia* L.; *A. rostratum* Nutt.; *Echinodorus rostratus* Engelm.] Wet grounds, St. Thomas; St. Croix.

### ELODEACEAE

*HALOPHILA BAILLONIS* Aschers. In salt water, St. Thomas.

*HALOPHILA ASCHERSONII* Ostenfeld. In salt water, St. Croix.

### HYDROCHARITACEAE

*THALASSIA TESTUDINUM* Konig. In salt water, St. Thomas; St. Jan; St. Croix.

## POACEAE

SACCHARUM OFFICINARUM L. Subspontaneous after cultivation, St. Croix, where it is extensively cultivated for sugar; grown in small patches on St. Thomas and St. Jan.

ANDROPOGON GLOMERATUS (Walt.) B. S. P. Doubtfully recorded from St. Thomas by Hackel.

ANDROPOGON BICORNIS L. [*Anatherum bicornis* Beauv.] On the high hills of St. Thomas and St. Jan.

ANDROPOGON LEUCOSTACHYUS H.B.K. St. Thomas.

ANDROPOGON JUNCIFOLIUS Desv. St. Croix.

ANDROPOGON CERIFERUS Hack. St. Thomas.

ANDROPOGON PANORMITANUS Parl. [*A. saccharoides* of Eggers; *A. Wrightii* of Millspaugh.] St. Croix.

ANDROPOGON SCHOENANTHUS L. Cultivated for perfume.

HETEROPOGON CONTORTUS (L.) Beauv. Krumbay, St. Thomas (according to Eggers).

HOLCUS SORGHUM L. [*H. saccharatus* L.; *Sorghum vulgare* Pers.; *Andropogon Sorghum* Brot.] Subspontaneous after cultivation, St. Croix; St. Thomas.

ANTHEPHORA HERMAPHRODITA (L.) Kuntze. [*Tripsacum hermaphroditum* L.; *Anthephora elegans* Schreb.; *A. villosa* Spreng.] Waste and cultivated grounds, St. Thomas; St. Croix.

NAZIA ALIENA (Spreng.) Scribn. [*Lappago aliena* Spreng.; *Nazia racemosa aliena* Scribn. & Smith; confused by authors with *Nazia racemosa* (L.) Kuntze = *Tragus racemosus* (L.) Haller.] Sandy fields, thickets and waste grounds, St. Thomas; St. Jan (according to Eggers); St. Croix.

VALOTA INSULARIS (L.) Chase. [*Andropogon insularis* L.; *Panicum leucophaeum* H.B.K.; *P. insulare* Meyer; *Tricholaena insularis* Griseb.; *Syntherisma insularis* Millsp.] Dry soil, St. Thomas; St. Jan; St. Croix.

VALOTA EGGERSII (Hack.) Hitchc. & Chase. [*Panicum Eggersii* Hack.] St. Thomas. Endemic.

SYNTERISMA DIGITATA (Sw.) Hitchc. [*Milium digitatum* Sw.; *Digitaria setigera* Roth; *D. horizontalis* Willd.; *Syntherisma setigera* Nash; *P. sanguinale vulgare* of Kuntze in part.] Fields, hills and cultivated grounds, St. Thomas; St. Croix.

SYNTERISMA SANGUINALIS (L.) Dulac. [*Panicum sanguinale* L.; *Digitaria marginata* Link.] Fields, hills and cultivated grounds, St. Thomas; St. Jan; St. Croix.

SYNTERISMA ISCHAEMUM (Schreb.) Nash. [*Panicum Ischaemum* Schreb.] St. Croix (according to Hitchcock & Chase).

The grass recorded by Eggers as *Digitaria filiformis* from Cowell Hill, St. Thomas, has not been further identified.

ERIOCHLOA PUNCTATA (L.) Desv. [*Milium punctatum* L.; *Helopus punctatus* Nees.] Moist grounds, St. Croix; St. Thomas.

ANASTROPHUS COMPRESSUS (Sw.) Schlecht. [*Milium compressum* Sw.; *Paspalum platycaulon* Poir.; *P. compressum* Rasp.] Wet grounds, St. Thomas; St. Jan; St. Croix.

PASPALUM GLABRUM Poir. [*P. Helleri* Nash; *Panicum plantagineum* of Millspaugh; ? *P. Richardi* Steud.] Wet grounds, St. Thomas; St. Jan; St. Croix.

PASPALUM PLICATULUM Michx. [*P. undulatum* Poir.; *P. caespitosum* of Eggers, at least in part.] Hillside, Buck Island, St. Thomas; St. Croix (according to Eggers).

PASPALUM PANICULATUM L. [*P. hemisphaericum* Poir.] St. Thomas (according to Schlechtendal).

PASPALUM FIMBRIATUM H.B.K. Waste grounds and roadsides, St. Croix.

PASPALUM ORBICULATUM Poir. [*P. pusillum* Vent.] St. Thomas (Fluegge; according to Grisebach).

PASPALUM CONJUGATUM Berg. Grassy places, St. Thomas; St. Jan; St. Croix.

PASPALUM NOTATUM Fluegge. St. Thomas is the type locality of the species, but the plant has not been found there by recent collectors.

PASPALUM VIRGATUM L. St. Jan; St. Croix (according to West).

PASPALUM SECANS Hitchc. & Chase. Sandy soil, St. Croix.

PASPALUM DISTICHUM L. Wet grounds, St. Thomas; St. Croix.

PASPALUM VAGINATUM Sw. [*P. distichum vaginatum* Sw.] Wet grounds, St. Croix.

PASPALUM SPATHACEUM Desv., recorded as from St. Thomas by Schlechtendal, is a species not understood by modern botanists.

PASPALUM MOLLE Poir., described as from St. Thomas, is a species not understood by modern botanists.

PANICUM GEMINATUM Forsk. [*P. paspaloides* of Eggers and of Millspaugh; *P. brizoides* Lam., not L.; *Paspalum appressum* Lam.] Wet grounds, St. Thomas; St. Jan; St. Croix.

PANICUM BARBINODE Trin. [*P. molle* of Eggers.] Moist grounds, St. Croix.

PANICUM REPTANS L. [*P. grossarium* L.; *P. prostratum* Lam.; *P. prostratum pilosum* Eggers; *P. caespitosum* Sw.] Hillside thickets, St. Thomas; St. Jan; St. Croix.

PANICUM FASCICULATUM Sw. [*P. fuscum* Sw.; *P. fasciculatum fuscum* Griseb.; *P. fasciculatum flavescens* of Kuntze.] Banks, hill-sides and thickets, St. Thomas; St. Jan; St. Croix.

PANICUM MILIACEUM L. Waste grounds, St. Croix.

PANICUM ADSPERSUM Trin. Hillside thicket, Bethania, St. Jan.

PANICUM CAYENNENSE Lam. St. Thomas (recorded with doubt by Schlechtendal).

PANICUM DIFFUSUM Sw. Rocky hillsides, St. Thomas; recorded from all three islands by Eggers and from St. Croix by Grisebach.

PANICUM MAXIMUM Jacq. [*P. jumentorum* Pers.; *P. polygamum* Sw.] Dry soil, St. Thomas; St. Jan; St. Croix.

PANICUM LAXUM Sw. Hillsides, St. Thomas.

PANICUM TRICHOIDES Sw. Barracks, St. Thomas (recorded by Eggers as *P. brevifolium* L.).

PANICUM GLUTINOSUM Sw. St. Croix (according to West).

LASIACIS DIVARICATA (L.) Hitchc. [*Panicum divaricatum* L.; *P. divaricatum glabrum* Kuntze.] Thickets and hillsides; St. Thomas; St. Jan; St. Croix.

LASIACIS HARRISHI Nash. St. Jan.

LASIACIS SORGHOIDEA (Desvaux) Hitchc. & Chase. [*Panicum sorghoideum* Desvaux; *P. latifolium* of Millspaugh.] Thickets, St. Thomas; St. Croix.

LASIACIS LIGULATA Hitchc. & Chase. [*Panicum divaricatum puberulum* Griseb.] Shaded bank, St. Peter, St. Thomas.

ECHINOCHLOA COLONUM (L.) Link. [*Panicum colonum* L.] Grassy places, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

OPLISMENUS HIRTELLUS (L.) Beauv. [*Panicum hirtellum* L.; *P. setarium* Lam.; *O. setarius* R. & S.; *Orthopogon setarius* Spreng.] Woodlands, St. Thomas; St. Jan; St. Croix.

CHAETOCCHLOA GENICULATA (Lam.) Millsp. & Chase. [*Panicum geniculatum* Lam.; *P. imberbe* Poir.; *Setaria glauca imberbis* Griseb.; *S. glauca* of Eggers; *Chaetochloa glauca* of Millspaugh.] Woodlands, waste and cultivated grounds, St. Thomas; St. Croix; St. Jan.

CHAETOCCHLOA SETOSA (Sw.) Scribn. [*Panicum setosum* Sw.; *Setaria setosa* Beauv.; *Panicum caudatum* Lam.; *Setaria setosa caudata* Griseb.; *Setaria macrostachya* of Schlechtendal.] Hillsides, St. Thomas; St. Croix; St. Jan.

CHAETOCCHLOA RARIFLORA (Mikan) Hitchc. & Chase. [*Setaria rariflora* Mikan.] Hillsides, St. Thomas; St. Croix.

CENCHRUS ECHINATUS L. [*C. viridis* of Millspaugh; *C. echinatus brevisetus* Scribn.; *C. echinatus tribuloides* of Kuntze.] Fields and hillsides, St. Thomas; St. Jan; St. Croix.

CENCHRUS CAROLINIANUS Walt. St. Thomas (according to Hitchcock & Chase).

CENCHRUS VIRIDIS Spreng. Dry soil, St. Thomas.

STENOTAPHIRUM SECUNDATUM (Walt.) Kuntze. [*Ischaemum secun-*



*datum* Walt.; *S. glabrum* Trin.; *S. americanum* Schrank.] Moist grounds, St. Thomas; St. Jan; St. Croix.

OLYRA LATIFOLIA L. Woodlands, St. Thomas; Cinnamon Bay, St. Jan (according to Eggers.)

PHARUS GLABER H.B.K. Woodlands, St. Thomas; St. Jan; St. Croix.

ORYZA SATIVA L. St. Thomas (according to Pilger).

ARISTIDA ADSCENSIONIS L. [*Aristida bromoides* H.B.K.; *A. stricta* Griseb., not Michx.; *A. americana* Pilger, not L.] Thickets and hillsides, St. Thomas; St. Jan; St. Croix.

ARISTIDA COGNATA Trin. & Rupr. [*A. Swartziana* Steud.] Hill-sides, St. Thomas; St. Croix.

SPOROBOLUS VIRGINICUS (L.) Kunth. [*Agrostis virginica* L.] Saline soil, St. Thomas; St. Jan; St. Croix.

SPOROBOLUS BERTEROANUS (Trin.) Hitchc. & Chase. [*Vilfa Berteroana* Trin.; *Sporobolus angustus* Buckley.] Wet grounds, St. Jan; St. Croix.

SPOROBOLUS ARGUTUS (Nees) Kunth. [*S. domingensis* of Millspaugh; ? *S. littoralis* of Eggers.] Saline soil, St. Croix.

SPOROBOLUS INDICUS (L.) R. Br. [*Agrostis indica* L.; *Vilfa tenacissima* Kunth.] Dry soil, St. Thomas; St. Jan; St. Croix.

SPOROBOLUS MURALIS (Raddi) Hitchc. & Chase. [*Agrosticula muralis* Raddi; *S. minutiflorus* of Millspaugh.] Waste grounds and roadsides, St. Croix.

CAPRIOLA DACTYLON (L.) Kuntze. [*Panicum Dactylon* L.; *Cynodon Dactylon* Pers.] Dry soil, St. Thomas; St. Jan; St. Croix.

CHLORIS RADIATA (L.) Sw. [*Agrostis radiata* L.] Dry soil, St. Thomas; St. Jan (according to Eggers); St. Croix.

CHLORIS PARAGUAIENSIS Steud. [*C. barbata* Sw.; *C. ciliata* of Eggers.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

CHLORIS SAGRAEANA A. Rich. [*C. eleusinoides* Griseb.] St. Croix.

CHLORIS CILIATA Sw. Dry soil, St. Thomas; St. Croix.

BOUTELOUA AMERICANA (L.) Scribn. [*Aristida americana* L.; *Heterostega juncifolia* Desv.; *B. litigiosa* Lag.] Hillsides and banks, St. Thomas; St. Jan; St. Croix.

GYMNOPOGON FOLIOSUS (Willd.) Nees. [*Chloris foliosa* Willd.] St. Thomas.

ELEUSINE INDICA (L.) Gaertn. [*Cynosurus indicus* L.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

DACTYLOCTENIUM AEGYPTIUM (L.) Richt. [*Cynosurus aegyptius* L.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

LEPTOCHLOA FILIFORMIS (Lam.) Beauv. [*Festuca filiformis* Lam.;

*L. mucronata* (Michx.) Kunth; *L. mucronata multiflora* Eggers.] St. Croix, along ditches (according to Eggers).

LEPTOCHLOA VIRGATA (L.) Beauv. [*Cynosurus virgatus* L.; ? *L. virgata gracilis* Eggers; *Chloris poaeformis* H.B.K.] Moist or wet grounds, St. Thomas; St. Jan; St. Croix.

DIPLACHNE FASCICULARIS (Lam.) Beauv. [*Festuca fascicularis* Lam.; *Leptochloa fascicularis* A. Gray.] In a ditch, St. John's Estate, St. Croix.

PAPPOPHORUM ALOPECUROIDEUM Vahl. [*P. laguroideum* Schrad.] Rocky hillsides, St. Thomas; Buck Island, St. Thomas (according to Eggers).

ERAGROSTIS PILOSA (L.) Beauv. [*Poa pilosa* L.; *E. poaoides* of Grisebach.] Dry soil, St. Thomas; St. Croix.

ERAGROSTIS TEPHROSANTHUS Schultes. Dry soil, St. Thomas; St. Croix.

ERAGROSTIS CILIARIS (L.) Link. [*Poa ciliaris* L.; *E. ciliaris laxa* Kuntze.] Dry soil, St. Thomas; St. Jan; St. Croix.

ERAGROSTIS AMABILIS (L.) Wight & Arn. [*Eragrostis plumosa* Link.] Cultivated grounds, St. Jan.

ERAGROSTIS BARRELIERI Dav. [*E. minor* of Millspaugh; *E. poaoides* of Eggers.] Dry soil, St. Thomas (according to Eggers); St. Croix.

ERAGROSTIS ELLIOTTII S. Wats. Dry soil, St. Thomas.

UNIOLA VIRGATA (Poir.) Griseb. [*Poa virgata* Poir; *U. racemiflora* Trin.] Bolongo, St. Thomas; Little St. James Island, St. Jan.

ARTHROSTYLIIDIUM CAPILLIFOLIUM Griseb. Flag Hill, St. Thomas; Battery, St. Jan.

BAMBOS VULGARIS Schrad. Naturalized in wet grounds, St. Thomas; St. Croix.

COIX LACRYMA-JOBI L. Cultivated for ornament.

ZEА MAYS L. Cultivated for food.

## CYPERACEAE

KYLLINGA BREVIFOLIA Rottb. [*K. monocephala* Thunb. of Schlechtendal and of Eggers.] Moist, grassy places, St. Thomas; St. Jan; St. Croix.

KYLLINGA ODORATA Vahl. [*K. triceps* of Eggers; *K. odorata minor* Boeckl.] Moist, shaded banks, St. Thomas; St. Jan.

KYLLINGA PUMILA Michx. Moist grassy places, St. Thomas, collected by Riedlé (according to Clarke).

KYLLINGA PUNGENS Link. Midland, St. Croix.

CYPERUS ODORATUS L. [*C. polystachyus* R. Br.; *Pycraeus odoratus* Urban.] Crown, St. Thomas, at about 500 m. altitude (according to

Eggers). Not found by us on St. Thomas, but collected on Tortola at about the same elevation.

CYPERUS LAEVIGATUS L. [*C. laevigatus albidus* Eggers; *C. mucronatus* Rottb.; *Juncellus laevigatus* Clarke.] Wet grounds, St. Thomas; St. Croix.

CYPERUS SURINAMENSIS Rottb. Wet or moist grounds, St. Thomas.

CYPERUS OCHRACEUS Vahl. Moist grounds, St. Croix.

CYPERUS ELEGANS L. [*C. viscosus* Sw.] Wet saline grounds, St. Thomas; St. Jan; St. Croix.

CYPERUS SPHACELATUS Rottb. Pastures and hillsides, Signal Hill and Crown, St. Thomas.

CYPERUS COMPRESSUS L. Moist ground, Haven Sight, St. Thomas (according to Eggers). Not found by us on St. Thomas, but collected on Virgin Gorda, Vieques and Culebra.

CYPERUS DISTANS L. f. [*Cyperus Eggersii* of Millspaugh.] Pastures and ditches, Signal Hill and St. Peter, St. Thomas; Mt. Eagle, St. Croix.

CYPERUS ESCULENTUS L. [*C. esculentus macrostachyus* Boeckl.] St. Thomas (according to Clarke).

CYPERUS ARTICULATUS L. Wet grounds, St. Thomas; St. Croix.

CYPERUS ROTUNDUS L. [*C. Hydra* Michx.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

CYPERUS CAYENNENSIS (Lam.) Britton. [*Kyllinga cayennensis* Lam.; *Mariscus flavus* Vahl; *Cyperus flavus* Nees; *Cyperus flavo-mariscus* Griseb.; *Mariscus cayennensis* Urban.] Grassy places, St. Thomas; St. Croix.

CYPERUS GRANULARIS (Desf.) Britton. [*Mariscus gracilis* Vahl; *Kyllinga filiformis capillaris* Griseb.; *C. capillaris* of Millspaugh.] Sandy soil, near the coast, St. Croix.

CYPERUS TENUIS Sw. St. Croix (according to Clarke).

CYPERUS LIGULARIS L. [*Mariscus rufus* H.B.K.; *M. ligularis* Urban.] Moist, especially saline soil, St. Thomas; St. Jan; St. Croix.

CYPERUS CONFERTUS Sw. [*Mariscus confertus* Sw.] Hillsides and thickets, St. Thomas; St. Croix (according to Grisebach).

CYPERUS PURPURASCENS Vahl. Coastal rocks, Water Island, St. Thomas; St. Croix.

CYPERUS BRUNNEUS Sw. [*C. brizaeus* Vahl; *C. Ottonis* Boeckl.; *C. discolor* Boeckl.; *Mariscus brunneus* Clarke.] Coastal sands, St. Thomas; St. Jan; St. Croix.

CYPERUS FERAX L. C. Rich. [*C. pennatus* of Eggers; *C. flexuosus* Vahl; *C. odoratus* of Eggers; *Torulanium ferax* Urban; *C. Michauxianus* of Millspaugh.] Wet grounds, St. Thomas; St. Croix.

CYPERUS VAHLII (Nees) Steud. Moist soil on hills, St. Thomas; St. Jan.

CYPERUS FILIFORMIS Sw. [*Torulium filiforme* Clarke; *C. unifolius* Boeckl.] Moist soil, St. Thomas; St. Croix.

CYPERUS FERRUGINEUS Poir. [*Pycraeus ferrugineus* Clarke] recorded from St. Thomas by Clarke on the evidence of a specimen in the herbarium of the British Museum, is probably an error in locality.

CYPERUS STRIGOSUS L. Recorded by Schlechtendal as found in a garden on St. Thomas, is probably an error in name.

ELEOCHARIS INTERSTINCTA (Vahl) R. & S. [*Scirpus interstinctus* Vahl.] Marshes, St. Thomas; St. Croix.

ELEOCHARIS MUTATA (Vahl) R. & S. [*Scirpus mutatus* Vahl; *E. cellulosa* of Millspaugh.] Wet grounds, St. Croix; St. Jan (according to Eggers).

ELEOCHARIS FLACCIDA (Spreng.) Urban. [*Scirpus flaccidus* Spreng. *E. ochreatea* Nees.] Wet grounds, St. Thomas.

ELEOCHARIS CAPITATA (L.) R. Br. [*Scirpus capitatus* L.] Wet grounds, St. Thomas; St. Jan; St. Croix.

ELEOCHARIS RETROFLEXA (Poir.) Urban. [*Scirpus retroflexus* Poir.; *Eleocharis Chaetaria* R. & S.] Moist grounds, St. Thomas.

ELEOCHARIS MINIMA Kunth. Krumbay, St. Thomas (according to Clarke).

ELEOCHARIS NODULOSA (Roth) Schultes. [*Scirpus nodulosus* Roth.] Adventure, St. Croix (according to Eggers).

SCIRPUS SUBDISTICHUS Boeckl., described as from St. Thomas, has not been identified by subsequent botanists.

SCIRPUS ARTICULATUS (Kunth) Griseb. is recorded as from St. Croix by Kunth, presumably erroneously, it being an Old World species.

FIMBRISTYLIS DIPHYLLA (Retz.) Vahl. [*Scirpus diphyllus* Retz.; ? *S. dichotomus* of Schlechtendal; *Scirpus brizoides* Muhl.; *Fimbristylis polymorpha* Boeckl.] Grassy places, St. Thomas; St. Jan; St. Croix.

FIMBRISTYLIS FERRUGINEA (L.) Vahl. [*Scirpus ferrugineus* L.] Moist, saline soil, St. Thomas; St. Jan; St. Croix.

FIMBRISTYLIS SPADICEA (L.) Vahl. [*Scirpus spadiceus* L.] Moist soil near the coast, St. Thomas; St. Croix.

ABILDGAARDIA MONOSTACHYA (L.) Vahl. [*Cyperus monostachyus* L.; *Fimbristylis monostachya* Hassk.] Moist, shaded bank, Rosenberg, St. Jan.

DICHROMENA CILIATA Vahl. [*Rynchospora pura* Griseb.] Pastures and hillsides, Signal Hill and Crown, St. Thomas; Bordeaux, St. Jan.

DICHROMENA RADICANS Schl. & Cham. Shaded banks, St. Thomas.

RYNCHOSPORA BERTERII (Spreng.) Clarke. [*Ilypolytrum Berterii* Spreng.; *Rynchospora pusilla* (Sw.) Griseb., not *R. pusilla* Cham.] Pastures, Signal Hill, St. Thomas (according to Eggers).

RYNCHOSPORA PODOSPERMA C. Wright. St. Thomas; a specimen in the Arnott Herbarium (according to Clarke).

SCLERIA DISTANS Poir. St. Thomas (according to Clarke).

SCLERIA LITHOSPERMA (L.) Sw: [*Scirpus lithospermus* L.; *Scleria filiformis* Sw.] Rocky thickets, St. Thomas; St. Croix.

SCLERIA PTEROTA Presl. [*Scleria pratensis* Nees; *S. communis* of Millspaugh.] Moist woodlands, St. Thomas; St. Jan; St. Croix.

SCLERIA SCINDENS Nees. Forests, Signal Hill, St. Thomas.

### ARECACEAE

COCCOTHRINAX ARGENTEA (Lodd.) Sarg. [*C. sancti-thomae* Beccari; *C. Eggersiana* Beccari; *C. Eggersiana sanctae-crucis* Beccari; *Thrinax argentea* Lodd.; ? *T. parviflora* of Eggers.] Hillsides, Water Island and Flag Hill, St. Thomas; St. Jan; St. Croix.

ACROCOMIA ACULEATA (Jacq.) Lodd. [*Cocos aculeata* Jacq.] Hillside, St. Peter, St. Thomas.

ROYSTONEA REGIA (H.B.K.) O. F. Cook. [? *Areca oleracea* of West; *Oreodoxa regia* H.B.K.; ? *O. oleracea* of Kuntze.] Wooded ravine, Tutu, St. Thomas; St. Croix. Planted for ornament.

COCOS NUCIFERA L. Spontaneous after planting, especially in coastal sands, St. Thomas; St. Jan; St. Croix.

SABAL —. Planted, Charlotte Amalia, St. Thomas.

BORASSUS FLABELLIFER L. Recorded by West as found on St. Croix. An East Indian palm.

### ARACEAE

ANTHURIUM ACAULE (Jacq.) Schott. [*Pothos acaulis* Jacq.; *Anthurium Huegelii* of Eggers.] On rocks and trees in shaded situations, St. Thomas; St. Jan; St. Croix (according to Eggers).

ANTHURIUM GRANDIFOLIUM (Jacq.) Kunth. [*Pothos grandifolia* Jacq.; *A. macrophyllum* of Eggers.] On rocks in woodlands, St. Thomas; St. Jan.

ANTHURIUM CORDATUM (Willd.) D. Don. [*Pothos cordata* Willd.; ? *P. macrophyllum* of West.] On rocks in forests, St. Jan; St. Croix.

ANTHURIUM SELLOUM C. Koch. On trees and rocks in forests, St. Jan.

PHILODENDRON KREBSII Schott. [*P. hederaceum* of Eggers.] On trees in forests, Crown, St. Thomas.

PHILODENDRON OXYCARDIUM Schott. On trees in forests, St. Thomas.

PHILODENDRON GIGANTEUM Schott. On rocks in dense forests, Signal Hill and Crown, St. Thomas (according to Eggers).

DIEFFENBACHIA SEGUINE (Jacq.) Schott. [*Arum Seguine* Jacq.] Caret Bay, St. Thomas (according to Eggers).

CALADIUM BICOLOR (Ait.) Vent. [*Arum bicolor* Ait.; ? *C. smaragdinum* of Eggers.] St. Thomas (according to Urban). Cultivated on St. Croix.

XANTHOSOMA ATROVIRENS C. Koch. Cultivated and naturalized, St. Thomas; St. Croix (according to Eggers).

XANTHOSOMA SAGITTIFOLIUM (L.) Schott. [*Arum sagittifolium* L.; *Arum maculatum* of Millspaugh.] Naturalized after cultivation, St. Thomas; St. Croix. Cultivated for its roots.

XANTHOSOMA ? HASTATUM Eggers, recorded by Eggers as spontaneous after cultivation on all three islands, has not been identified. *Arum hastatum* Vahl, cited by Eggers as a synonym, is, an unpublished name, printed in West's Flora of St. Croix.

PISTIA STRATIOTES L. [*P. occidentalis* Blume.] Naturalized in gardens, St. Thomas (according to Eggers).

#### LEMNACEAE

LEMNA PERPUSILLA Torr. [*L. minor* Eggers; *L. paucicostata* Hegelm.] In still fresh water, St. Croix; St. Jan (according to Eggers).

#### BROMELIACEAE

BROMELIA PINGVIN L. Hillsides and thickets; used for hedges, St. Thomas; St. Croix; St. Jan.

WITTMACKIA LINGULATA (L.) Mez. [*Bromelia lingulata* L.; *Chevalliera lingulata* Griseb.] On trees and rocks on hills, St. Thomas; St. Jan.

PITCAIRNIA LATIFOLIA Sol. St. Croix (according to Mez).

PITCAIRNIA ANGUSTIFOLIA (Sw.) Redouté. [*Hepetis angustifolia* Sw.] On rocks, St. Thomas; St. Jan; St. Croix.

CATOPSIS NUTANS (Sw.) Griseb. On trees in forests, high hills of St. Thomas and St. Jan.

TILLANDSIA UTRICULATA L. On trees and rocks, St. Thomas; St. Croix.

TILLANDSIA FASCICULATA L. On trees in woodlands, St. Thomas; St. Jan.

TILLANDSIA RECURVATA L. On trees, St. Thomas; St. Jan; St. Croix.

Eggers records, in his supplementary list, another, undetermined *Tillandsia* from Adrian, St. Jan.

DENDROPOGON USNEOIDES (L.) Raf. [*Tillandsia usneoides* L.] On trees and shrubs, St. Thomas; St. Jan; St. Croix.

ANANAS ANANAS (L.) Cook & Collins. [*Bromelia Ananas* L.; *Ananas sativus* Lindl.] Cultivated for its fruit.

### COMMELINACEAE

COMMELINA LONGICAULIS Jacq. [*C. cayennensis* L. C. Rich.; *C. communis* of West; *C. nudiflora* Clarke, not L.] Moist shaded situations, St. Thomas; St. Jan; St. Croix.

COMMELINA ELEGANS H.B.K. [*C. virginica* of Millspaugh and of Kuntze.] Moist grounds, St. Thomas; St. Croix.

CALLISIA REPENS L. Shaded situations, St. Thomas; St. Jan; St. Croix.

CALLISIA MONANDRA (Sw.) Schult. [*Tradescantia monandra* Sw.; *Callisia umbellulata* Lam.] Among shaded rocks, Signal Hill, St. Thomas (according to Eggers).

RHOEO DISCOLOR (L'Her.) Hance. [*Tradescantia discolor* L'Her.] Waste rocky places, St. Thomas; St. Jan; St. Croix.

ZEBRINA PENDULA Schnitzl. Lawns and cultivated grounds, St. Thomas; St. Croix. Naturalized.

### PONTEDERIACEAE

PIAROPUS CRASSIPES (Mart.) Raf. [*Pontederia crassipes* Mart.; *Eichhornia crassipes* Solms; *E. azurea* of Millspaugh.] In water, St. Croix.

### LILIACEAE

ALOE VERA L. [*Aloe vulgaris* Lam.; *A. perfoliata* of West.] On limestone and in fields, St. Thomas; St. Jan; St. Croix. Naturalized.

**Cordyline guineensis** (Jacq.) Britton. [*Aletris guineensis* Jacq.; *Sansevieria guineensis* Willd.] Hillsides, St. Thomas; St. Croix. Naturalized.

YUCCA ALOIFOLIA L. [*Y. Draconis* L.] Planted for ornament.

YUCCA GLORIOSA L., is recorded by Eggers as naturalized in gardens and near dwellings on St. Thomas and St. Croix. Planted for ornament.

ALLIUM PORRUM L. Cultivated for food.

ALLIUM CEPA L. Cultivated for food.

ALLIUM FISTULOSUM L. Cultivated for food.

ALLIUM SATIVUM L. Cultivated for food.

## CONVALLARIACEAE

ASPARGUS OFFICINALIS L. Planted for food.

## SMILACEAE

SMILAX ILICIFOLIA Kunth. [*S. havenensis* of Eggers.] Hillside thickets, St. Jan (?); St. Croix.

SMILAX CORIACEA Spreng. [*S. subarmata* O. E. Schulz; *S. populnea* of Eggers.] Hillside thickets, St. Thomas; St. Croix.

SMILAX ROTUNDIFOLIA L., cited by O. E. Schulz as from St. Croix, is an error in record or determination.

SMILAX DOMINGENSIS Willd., cited by A. de Candolle from St. Thomas, is an error in locality.

## AMARYLLIDACEAE

ATAMASCO TUBISPATHA (L'Her.) Maza. [*Amaryllis tubispatha* L'Her.; *Zephyranthes tubispatha* Herb.] In fields and near dwellings, St. Thomas; St. Croix; St. Jan (according to Eggers).

ATAMASCO ROSEA (Lindl.) Greene. [*Zephyranthes rosea* Lindl.; ? *Amaryllis Atamasco* of West.] Cultivated for ornament.

CRINUM ERUBESCENS Ait. Along rivulets, St. Croix (according to Eggers); cultivated for ornament.

CRINUM GIGANTEUM Andr. Cultivated for ornament.

CRINUM LONGIFOLIUM Herb. Cultivated for ornament, St. Croix, and seemingly an escape (according to Millspaugh).

HYMENOCALLIS DECLINATA (Jacq.) Roem. [*Hymenocallis expansa* Herb.; *Panocratium caribaeum* of Eggers; *P. declinatum* Jacq.; ? *P. patens* of Schlechtendal; *H. caribaea* of Millspaugh.] Rocky coasts and hillsides, St. Thomas; St. Croix; St. Jan.

HYMENOCALLIS CARIBAEA (L.) Herb. [*Panocratium caribaeum* L.] Planted for ornament.

HIPPEASTRUM PUNICEUM (Lam.) Urban. [*Amaryllis puniceum* Lam.; *A. equestris* Ait.; *Hippeastrum equestre* Herb.] Rocky shores and hillsides, St. Thomas; St. Croix; St. Jan.

AGAVE SISALANA Perrine. Persistent after cultivation, St. Croix. Cultivated for fiber.

AGAVE MISSIONUM Trelease. [*Agave americana* of Eggers in part; *A. sobolifera* and *A. Morrisii* of Eggers.] Hillsides, St. Thomas; St. Jan. Known otherwise on the other Virgin Islands and on Porto Rico.

AGAVE EGGERSIANA Trelease. [*A. americana* of West and of Eggers, in part, and of Millspaugh.] St. Croix. Endemic, but not definitely known in the wild state. Planted for ornament.

FURCRAEA TUBEROSA Ait. f. [*F. cubensis* of Eggers and of Mills-



paugh; *F. hexapetala* of Urban, in part.] Thickets, St. Thomas; St. Croix.

HYPOXIS DECUMBENS L. Grassy banks, St. Jan.

AMARYLLIS BELLADONNA L. Planted for ornament.

POLIANTHES TUBEROSA L. Planted for ornament.

#### DIOSCOREACEAE

DIOSCOREA PILOSIUSCULA Bert. Forests, high hills of St. Thomas; St. Jan.

DIOSCOREA ALATA L. Persistent after cultivation, St. Thomas; St. Croix; St. Jan.

DIOSCOREA SATIVA L. [*D. altissima* of Eggers, at least in part.] Persistent after cultivation, all islands (according to Eggers). Cultivated for its roots.

RAJANIA CORDATA L. [*R. pleironeura* Griseb.; *R. hastata* of Eggers.] Forests, hills of St. Thomas.

#### IRIDACEAE

**Galatea bulbosa** (Mill.) Britton. [*Sisyrinchium bulbosum* Mill.; *S. palmifolium* Cav.; *Cipura plicata* Griseb.; *Eleutherine plicata* Herb.] Valleys, St. Croix. Grown in flower gardens.

#### MUSACEAE

MUSA PARADISIACA L. Cultivated for its fruit.

MUSA SAPIENTUM L. Cultivated for its fruit.

#### ZINGIBERACEAE

ALPINIA OCCIDENTALIS Sw. [*Anomum sylvestre* of West; *Renealmia occidentalis* Sweet; *R. sylvestris* of Eggers.] Forests and shaded situations, Golden Rock, St. Croix; Signal Hill, St. Thomas.

ZINGIBER ZINGIBER (L.) Karst. [*Anomum Zingiber* L.; *Zingiber officinale* Rosc.] Spontaneous after cultivation. St. Thomas; St. Croix.

CURCUMA LONGA L. Cultivated for tumeric.

LANGUAS SPECIOSA (Wendl.) Small. [*Zerumbet speciosum* Wendl.; *Alpinia nutans* Rosc.] Planted for ornament.

#### CANNACEAE

CANNA INDICA L. Moist waste places, St. Thomas; St. Croix (according to Eggers). The plant may have been mistaken for *C. coccinea* Ait.

CANNA LAMBERTI Lindl. Naturalized in gardens, all islands (according to Eggers); escaped in places, St. Croix (according to Mills-paugh).

CANNA EDULIS Ker. Cultivated for its tubers.

CANNA LUTEA Mill. Cultivated and escaped in gardens at Bassin, St. Croix (according to Mills-paugh).

### MARANTACEAE

MARANTA ARUNDINACEA L. [*Maranta indica* Tuss. of Mills-paugh.] Escaped or spontaneous after cultivation, St. Thomas; St. Croix.

### ORCHIDACEAE

HABENARIA MONORRHIZA (Sw.) Rchb. f. [*Orchis monorrhiza* Sw.; *Habenaria maculosa* of Eggers.] Hillsides, St. Thomas; St. Croix (according to Cogniaux.)

HABENARIA ALATA Hook. Signal Hill, St. Thomas.

VANILLA EGGERSII Rolfe. [*V. aphylla* Eggers, not Blume.] Thickets, St. Thomas.

Beadlea elata (Sw.) Small. [*Satyrium elatum* Sw.; *Spiranthes elata* L. C. Rich.] In leaf mould and on wet shaded banks on high hills, St. Thomas; St. Jan; St. Croix.

IBIDIUM TORTILE (Sw.) House. [*Satyrium tortile* Sw.; *Spiranthes tortilis* L. C. Rich.] Grassy hillsides, St. Thomas.

STENORRHYNCHUS LANCEOLATUS (Aubl.) Griseb. In clayey soil among rocks, Signal Hill, St. Thomas (according to Eggers.)

CRANICHIS MUSCOSA Sw. Woods between Crown and Signal Hill, St. Thomas.

PRESCOTTIA OLIGANTHA (Sw.) Lindl. [*Cranichis oligantha* Sw.; *Prescottia myosurus* Rchb. f.] Grassy fields and banks, hills of St. Thomas; shaded bank, Bordeaux, St. Jan.

PRESCOTTIA STACHYODES (Sw.) Lindl. [*Cranichis stychyodes* Sw.] Wooded hills, Bordeaux, St. Jan.

PONTHIEVA GLANDULOSA (Sims) R. Br. [*Neottia glandulosa* Sims.] Wet shaded banks, St. Thomas; St. Jan.

LIPARIS ELATA Lindl. Among rocks on high hills, St. Thomas.

LIPARIS EGGERSII Rchb. f. Bonne Résolution, St. Thomas. Perhaps not distinct from the preceding species.

POLYSTACHYA MINUTA (Aubl.) Britton. [*Epidendrum minutum* Aubl.; *Polystachya luteola* Hook.; *Cranichis luteola* Sw.] On rocks, walls and trees, Signal Hill and St. Peter, St. Thomas.

EPIDENDRUM PAPILIONACEUM Vahl. [*E. bifidum* Sw.; *E. papilionaceum grandiflorum* Cogn.] On small trees and shrubs, St. Thomas; St. Jan; St. Croix.

EPIDENDRUM CILIARE L. On shaded rocks and trees, St. Thomas; St. Jan; St. Croix.

EPIDENDRUM COCHLEATUM L. On trees, Mt. Eagle and Jacob's Peak, St. Croix (according to Eggers).

EPIDENDRUM PATENS Sw. On rocks, Signal Hill, St. Thomas (according to Eggers).

EPIDENDRUM CARINATUM Vahl, of St. Croix, is a species unknown to modern botanists.

TETRAMICRA ELEGANS (Hamilt.) Cogn. [*Cyrtopodium elegans* Hamilt.; *Epidendrum subaequale* Eggers.] Rocky hillsides, St. Thomas; St. Jan; St. Croix.

BRASSAVOLA CUCULLATA (L.) R. Br. [*Epidendrum cucullatum* L.] On rocks, St. Thomas.

IONOPSIS UTRICULARIOIDES (Sw.) Lindl. [*Epidendrum utricularioides* Sw.] St. Thomas (according to Cogniaux).

ONCIDIUM LEIBOLDI Rchb. f. Flag Hill, St. Thomas (according to Cogniaux).

ONCIDIUM VARIEGATUM Sw. On shrubs and trees, rarely on rocks, St. Thomas; St. Croix.

ONCIDIUM INTERMEDIUM Bertero. [*O. Lemonianum* Lindl.] Forests and thickets, rare, Picaria Peninsula and Fortuna, St. Thomas (according to Eggers).

## CASUARINACEAE

CASUARINA EQUISETIFOLIA L. Planted; occasionally spontaneous on St. Thomas.

## PIPERACEAE

PIPER AMALAGO L. [*P. medium* Jacq.; *P. Sieberi* C. DC.] Woodlands and forests, St. Thomas; St. Jan; St. Croix.

PIPER DILATATUM L. C. Rich. [*Piper Bredermyeri* of Eggers and of Millspaugh.] Shaded valleys, St. Croix.

PIPER BLATTARUM Spreng. Forests, Crown and Signal Hill, St. Thomas (according to Eggers); known otherwise only from Porto Rico.

PIPER RETICULATUM L. St. Croix (according to West).

PIPER AURITUM Kunth, is recorded by C. de Candolle, with doubt, as collected on St. Thomas by Friedericksthal; the record is probably erroneous.

PIPER TENUIFLORUM Vahl, St. Croix (according to West). A species not understood by modern botanists.

PIPER INCURVUM Sieb., is recorded from St. Croix; the record is questioned by C. de Candolle.

PIPER RETROFRACTUM Vahl. Cultivated on St. Thomas.

POTOMORPHE PELTATA (L.) Miq. [*Piper peltatum* L.; *P. umbellatum* L.] Forests, shaded banks and along rivulets, St. Thomas; St. Croix.

PEPEROMIA GLABELLA (Sw.) A. Dietr. [*Piper glabellum* Sw.] On trees and rocks in forests, St. Thomas; St. Jan.

PEPEROMIA ALATA C. DC. [*P. cubana* of de Candolle, in part.] On trees, St. Croix.

PEPEROMIA PELLUCIDA (L.) H.B.K. [*Piper pellucidum* L.] On walls and in wet shade, St. Thomas; St. Jan; St. Croix; in forests, St. Croix (according to Eggers).

PEPEROMIA SCANDENS R. & P. is recorded by C. de Candolle as found by Friederichsthal on St. Thomas (Prodr. 16: 434, 1869); but in his description of West Indian Piperaceae (Urban Symb. Ant. 3: 229. 1902), St. Thomas is not cited. The earlier record is, presumably, erroneous.

PEPEROMIA GUADALUPENSIS C. DC. [*Piper acuminatum* of West; *P. acuminata* of Eggers, in part.] St. Croix, according to de Candolle, collected by West; on rocks in forests, all islands (according to Eggers).

PEPEROMIA HAMILTONIANA Miquel. [*P. Hamiltoniana emarginata* C. DC.; *P. acuminata* of Millspaugh.] Shaded rocks, St. Croix.

PEPEROMIA MAGNOLIAEFOLIA (Jacq.) A. Dietr. [*Piper magnoliaefolium* Jacq.; ? *Piper obtusifolium* of West; *Peperomia obtusifolia* and *P. obtusifolia clusiaefolia* of Eggers.] In woodlands, St. Thomas; St. Croix.

PEPEROMIA HUMILIS (Vahl) A. Dietr. [*Piper humile* Vahl; *Peperomia Langsdorffii* Miq.; *P. polystachya* of Millspaugh.] Shaded rocks, St. Thomas; St. Jan; St. Croix.

PEPEROMIA MYRTIFOLIA (Vahl) A. Dietr. [*Piper myrtifolium* Vahl.] St. Croix, collected only by Pflug. Endemic.

PEPEROMIA POLYSTACHYA (Ait.) Miq. [*Piper polystachyon* Ait.] St. Croix (according to Hooker); among rocks in forests, all islands (according to Eggers). Perhaps not distinct from *P. humilis*.

PEPEROMIA RUPERTIANA C. DC.(?) Wet, shaded bank, Rosenberg, St. Jan. Determined from a barren specimen, and identification therefore doubtful.

#### SALICACEAE

SALIX CHILENSIS Molina. [*S. Humboldtiana* Willd.] In water, near Grove Place, St. Croix.

#### ULMACEAE

CELTIS TRINERVIA Lam. Forests and thickets, St. Thomas; St. Jan.

MOMISIA IGUANAEA (Jacq.) Rose & Standley. [*Rhamnus iguanaea* Jacq.; *Celtis aculeata* Sw.; *Celtis aculeata serrata* Eggers.] Thickets, St. Thomas; St. Jan; St. Croix.

TREMA MICRANTHUM (L.) Blume. [*Rhamnus micranthus* L.; *Celtis micrantha* Sw.; *Sponia micrantha* Dene.] Woodlands, St. Thomas; St. Jan; St. Croix.

## MORACEAE

CHLOROPHORA TINCTORIA (L.) Gaud. [*Morus tinctoria* L.; *Mac-lura tinctoria* D. Don.] Woodlands, St. Thomas; St. Jan (according to Eggers); St. Croix.

ARTOCARPUS INCISA L. f. Hillsides and valleys, naturalized and planted, St. Thomas; St. Jan; St. Croix.

FICUS URBANIANA Warburg. [*Ficus crassinervia* of Eggers in part, and of Millspaugh.] Woods, St. Croix. Sometimes planted.

FICUS CRASSINERVIA Desf. [*Ficus trigonata* of Eggers.] Forests, St. Thomas; St. Croix.

FICUS LAEVIGATA Vahl. [*Ficus lentiginosa* Vahl; *Ficus populnea* Willd.; *F. thomae* Miq.; *F. sancti-crucis* Miq.; *F. pedunculata* Vahl.] Forests, woodlands and hillsides, St. Thomas; St. Jan; St. Croix.

FICUS CARICA L. Planted for its fruit.

FICUS ELASTICA Roxb. Planted for shade and ornament.

CECROPIA PELTATA L. Forests and hillsides, St. Thomas; St. Jan; St. Croix.

## URTICACEAE

URERA ELATA (Sw.) Griseb. [*Urtica elata* Sw.] Spring Garden, St. Croix, collected by West; Eggers records West's specimen as preserved in the Copenhagen herbarium.

URERA BACCIFERA (L.) Gaud. [*Urtica baccifera* L.] is cited by Eggers as recorded from St. Thomas by Weddell in de Candolle's Prodrômus 16<sup>t</sup>: 93, but an examination of pages 93 and 94 of that work does not verify the citation, and the plant is otherwise unknown from these islands.

URTICA ELONGATA Vahl (St. Croix, West) is a species unknown to modern botanists.

FLEURYA AESTUANS (L.) Gaud. [*Urtica aestuans* L.] On rocks, walls and in forests, St. Thomas; St. Jan; St. Croix.

PILEA MICROPHYLLA (L.) Liebm. [*Parietaria microphylla* L.; *Adicea microphylla* Kuntze; *P. microphylla trianthemoides* and *succulenta* of Eggers; *Adicea microphylla trianthemoides* and *succulenta* of Millspaugh.] Rocky situations, St. Thomas; St. Jan; St. Croix.

PILEA TENERRIMA Miquel. Shaded banks, St. Jan.

PILEA RICHARDI Urban. St. Thomas, collected by L. C. Richard, the specimen preserved in the Copenhagen herbarium (according to Urban). Endemic.

PILEA INAEQUALIS (Juss.) Wedd. [*Urtica inaequalis* Juss.; *Adicea inaequalis* Kuntze.] On rocks in forests, Signal Hill and Crown, St. Thomas.

PILEA SANCTAE-CRUCIS Liebm. [*Adicea sanctae-crucis* Kuntze; *Pilea semidentata* of Eggers; *Pilea grandis* of Eggers.] Forests, St. Thomas; St. Jan; St. Croix.

PILEA NUMMULARIAEFOLIA (Sw.) Wedd. [*Urtica nummulariaefolia* Sw.; *Adicea nummulariaefolia* Kuntze.] Shaded situations, St. Thomas; St. Croix.

PILEA GRANDIFOLIA (L.) Blume. [*Pilea grandis* Wedd.] Recorded by de Candolle (Prodr. 16<sup>1</sup>: 143) as from Jamaica and St. Thomas, is confined to Jamaica, where there is a parish of St. Thomas.

ROUSSELIA HUMILIS (Sw.) Urban. [*Urtica humilis* Sw.; *U. lappulacea* Sw.; *Rousselia lappulacea* Gaud.] Shaded situations, St. Thomas.

#### OLACACEAE

SCHOEPIA SCHREBERI Gmelin. [*Codonium arborescens* Vahl; *S. arborescens* R. & S.] Woodlands, St. Thomas; St. Croix.

#### LORANTHACEAE

DENDROPEMON CARIBAEUS Krug & Urban. [*Loranthus emarginatus* of Eggers; *Phthirusa caribaea* Engler.] On trees, St. Thomas; St. Jan; St. Croix.

PHORADENDRON CHRYSOCARPUM Krug & Urban. [*Phoradendron flavens* of Eggers; *P. martinicense* of Millspaugh.] On trees, St. Thomas; St. Croix.

PHORADENDRON TRINERVIUM (Lam.) Griseb. is recorded by Trelease as represented in the Ventenat Herbarium by a specimen from St. Thomas; it is otherwise unknown from the islands.

PHORADENDRON RACEMOSUM (Aubl.) Krug & Urban. [*P. penninervium* O. Kuntze] is recorded by O. Kuntze as from St. Thomas, apparently erroneously; the specimen was probably from Porto Rico.

#### ARISTOLOCHIACEAE

ARISTOLOCHIA ODORATISSIMA L. Hillside thickets, St. Jan.

ARISTOLOCHIA TRILOBATA L. Thickets, St. Thomas; St. Jan; St. Croix (according to West).

ARISTOLOCHIA ANGUICIDA L. Thickets, St. Croix.

ARISTOLOCHIA RINGENS Vahl. Cultivated on St. Croix (according to West).

## POLYGONACEAE

COCOLOBIS KRUGII Lindau. Rocky Hills, Little St. James Island, St. Jan.

COCOLOBIS PYRIFOLIA Desf. [*C. Kunthiana* Meissn.; *C. pyrifolia Jacquinii* of Eggers.] St. Thomas (according to Lindau).

COCOLOBIS OBTUSIFOLIA Jacq. [*C. microstachys* Willd.; *C. microstachya ovalifolia* Meissn.; *C. punctata microstachya* of Eggers; *C. punctata parvifolia* of Millspaugh.] Thickets, St. Thomas; St. Jan; St. Croix.

COCOLOBIS KLOTZSCHIANA Meissn. St. Thomas and St. Croix (according to Lindau). Endemic. Perhaps not distinct from the preceding species.

COCOLOBIS DIVERSIFOLIA Jacq. [*C. barbadensis* Jacq.; *C. punctata* of Eggers; *C. coronata* of Millspaugh.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

COCOLOBIS LAURIFOLIA Jacq. [*C. leoganensis* of Eggers.] Thickets, St. Croix.

COCOLOBIS RUGOSA Desf. St. Thomas (according to de Candolle, a specimen being preserved in the Delessert Herbarium); not known to be on St. Thomas at the present time but may have been there before the forests were cut away; known otherwise only from Porto Rico.

COCOLOBIS UVIFERA (L.) Jacq. [*Polygonum Uvifera* L.; *C. leoganensis* Jacq.; *Uvifera leoganensis* Kuntze.] Coastal thickets and locally on hills, St. Thomas; St. Jan; St. Croix.

COCOLOBIS VENOSA L. [*C. exoriata* L.; *C. nivea* Jacq.] Woods and hillsides, St. Thomas; St. Croix.

ANTIGONUM CINERASCENS M. & G. [*A. cordatum* of Eggers and of Millspaugh.] Roadsides, St. Thomas; cultivated for ornament, St. Thomas and St. Croix.

FAGOPYRUM FAGOPYRUM (L.) Karst. [*Polygonum Fagopyrum* L.] Planted for food.

RUMEX VESICARIUS L. Recorded by Eggers as cultivated.

MUHLENBECKIA PLATYCLADA (F. Muell.) Lindau. Planted for interest.

## CHENOPODIACEAE

CHENOPODIUM MURALE L. Walls and waste grounds, St. Thomas; St. Croix.

CHENOPODIUM AMBROSIODES L. [? *C. cuneifolium* Vahl.] Walls and waste grounds, St. Thomas; St. Jan; St. Croix.

ATRIPLEX PENTANDRA (Jacq.) Standley. [*Axyris pentandra* Jacq.; *Atriplex cristata* H. & B.; *Obione cristata* Moq.] Coastal sands, St. Thomas; St. Jan; St. Croix.

SALICORNIA PERENNIS Mill. [*S. ambigua* Michx.] Salt marshes, St. Croix.

BETA VULGARIS L. Cultivated for food.

#### AMARANTHACEAE

CELOSIA NITIDA Vahl. [*C. paniculata* of Schlechtendal.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

CELOSIA ARGENTEA L. [*C. margaritacea* L.] Waste and cultivated grounds, St. Thomas; St. Croix.

CELOSIA CRISTATA L. Planted for ornament.

CHAMISSOA ALTISSIMA (Jacq.) H.B.K. [*Achyranthes altissima* Jacq.; *Kokera paniculata* Kuntze.] Forests and thickets, St. Thomas; St. Croix.

AMARANTHUS DUBIUS Mart. [*A. tristis* Willd., not L.; *A. paniculatus* of Eggers and of Millspaugh.] Waste grounds, St. Thomas; St. Jan; St. Croix.

AMARANTHUS SPINOSUS L. Waste and cultivated grounds, St. Thomas; St. Croix.

AMARANTHUS CRASSIPES Schl. [*Scleropus amarantoides* Schrad.] Dry soil, waste and cultivated grounds, St. Thomas; St. Croix.

AMARANTHUS CAUDATUS L. St. Croix (according to West).

AMARANTHUS POLYGONOIDES L. [*Amblyogyne polygonoides* Raf.] Sandy soil, roadsides and waste grounds, St. Thomas; St. Croix.

AMARANTHUS GRACILIS Desf. [*Chenopodium caudatum* Jacq.; ? *Amaranthus oleraceus* of West; *Euxolus caudatus* Moq.; *E. oleraceus* of Eggers.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

AMARANTHUS GANGETICUS L. [*A. incomptus* Willd.; *A. tricolor* L.] Planted for ornament.

CENTROSTACHYS INDICA (L.) Standley. [*Achyranthes aspera indica* L.; *Achyranthes aspera obtusifolia* Griseb.; *A. aspera simplex* Millsp.] Waste and cultivated grounds, St. Thomas; St. Croix.

CENTROSTACHYS ASPERA (L.) Standley. [*Achyranthes aspera* L.; *A. argentea* Lam.] is recorded from the islands by Eggers, but I have seen no specimens nor find any other record; the plant occurs, however, on Tortola.

ACHYRANTHES POLYGONOIDES (L.) Lam. [*Gomphrena polygonoides* L.; *Alternanthera polygonoides* R. Br.; *Alternanthera paronychioides* St. Hil.] Waste grounds, St. Thomas.

ACHYRANTHES REPENS L. [*Alternanthera Achyrantha* R. Br.; *A. paronychioides* of Millspaugh.] Rocky waste places, St. Thomas; St. Croix.

ACHYRANTHES FICOIDEA (L.) Standley. [*Gomphrena ficoidea* L.;



*Illecebrum ficoideum* L.; *Alternanthera ficoidea* R. Br.] Moist places and on shores, St. Thomas.

ACHYRANTHES PORTORICENSIS (Kuntze) Standley. [*Alternanthera portoricensis* Kuntze.] Rocky hills, Little St. James Island, St. Jan.

GOMPHIRENA GLOBOSA L. Subspontaneous after cultivation, St. Thomas; St. Croix.

IRELINE ANGUSTIFOLIA Euphr. [*I. elatior* L. C. Rich.] Thickets, and banks, St. Thomas; St. Croix.

PHILOXERUS VERMICULATUS (L.) R. Br. [*Illecebrum vermiculatum* L.; *Lithophila vermiculata* Uline; *Iresine vermicularis* Miq.] Saline soil along the coasts, St. Thomas; St. Croix.

LITHOPHILA MUSCOIDES Sw. Rocks on the shore, Judith's Fancy, St. Croix.

#### NYCTAGINACEAE

MIRABILIS JALAPA L. [*M. dichotoma* L.] Waste grounds, St. Thomas; St. Croix.

BOERHAAVEA ERECTA L. Waste and cultivated ground, St. Croix.

BOERHAAVEA COCCINEA Mill. [*B. paniculata* L. C. Rich.; *B. diffusa* Sw.; *B. decumbens* Vahl; *B. hirsuta* Willd.; *B. diffusa paniculata* Kuntze; *B. repens* of Millspaugh.] Dry soil, St. Thomas; St. Croix; St. Jan.

COMMICARPUS SCANDENS (L.) Standley. [*Boerhaavea scandens* L.] Rocky hillsides, St. Thomas.

PISONIA ACULEATA L. Hillsides, woods and thickets, St. Thomas; St. Croix.

PISONIA SUBCORDATA Sw. [*P. nigricans* of West.] Thickets and woods, St. Thomas; St. Croix.

TORRUBIA FRAGRANS (Dum.-Cours.) Standley. [*Pisonia fragrans* Dum.-Cours.; *Pisonia inermis* of Eggers, of Kuntze and of Millspaugh; ? *P. coccinea* of West.] Forests and thickets, St. Thomas; St. Croix.

BOUGAINVILLEA SPECTABILIS Willd. Cultivated for ornament.

EGGERSIA BUXIFOLIA Hook. f. [*Neea buxifolia* Heimerl.] Dry hillsides, St. Thomas; St. Jan.

#### BATIDACEAE

BATIS MARITIMA L. Shores of salt water lagoons, St. Thomas; St. Croix.

#### PHYTOLACCACEAE

RIVINA HUMILIS L. [*R. laevis* L.; *Tithonia humilis* Kuntze.] Dry, shaded situations, St. Thomas; St. Jan; St. Croix.

TRICHOSTIGMA OCTANDRUM (L.) H. Walt. [*Rivina octandra* L.; *Villamilla octandra* Hook. f.; *Rivina scandens* Mill.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

PETIVERIA ALLIACEA L. Dry, shaded situations, St. Thomas; St. Jan; St. Croix.

MICROTEA DEBILIS Sw. Waste grounds, St. Thomas; St. Croix.

#### AIZOACEAE

MOLLUGO VERTICILLATA L. Dry soil, Buck Island, St. Thomas;

MOLLUGO NUDICAULIS L. Rocky soil and banks, St. Thomas. St. Croix.

SESUVIUM PORTULACASTRUM L. [*Halimus portulacastrum* Kuntze.] Saline soil, St. Thomas; St. Jan; St. Croix.

TRIANTHEMA PORTULACASTRUM L. [*T. monogynum* L.] Waste and rocky places. St. Thomas; St. Croix.

CYPSELEA HUMIFUSA Turp. Around a small fresh-water lagoon, Water Island, St. Thomas (according to Eggers).

#### PORTULACACEAE

TALINUM TRIANGULARE (Jacq.) Willd. [*Portulaca triangularis* Jacq.] Rocky soil, St. Thomas; St. Croix.

TALINUM PANICULATUM (Jacq.) Gaertn. [*Portulaca paniculata* Jacq.; *P. patens* Jacq.; *Talinum patens* Willd.] Rocky soil, St. Thomas; St. Jan; St. Croix.

PORTULACA OLERACEA L. [*P. oleracea macrantha* and (?) *micrantha* Eggers.] Sunny situations, St. Thomas; St. Jan; St. Croix.

PORTULACA PILOSA L. Cultivated and waste grounds, St. Thomas; St. Croix.

PORTULACA HALIMOIDES L. Sunny situations, St. Thomas; St. Jan; St. Croix.

PORTULACA QUADRIFIDA L. Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

PORTULACA BRASILIENSIS West, of St. Croix, is not described. The plant was probably one of the preceding species.

#### BASELLACEAE

BOUSSINGAULTIA LEPTOSTACHYS Moq. [*B. baselloides* of Eggers.] Naturalized in gardens and cultivated, St. Thomas; St. Croix.

BASELLA RUBRA L. Cultivated on St. Croix.

#### ALSINACEAE

DRYMARIA CORDATA (L.) Willd. [*Holosteum cordatum* L.; *D. cordata diandra* Eggers.] Shaded moist places, St. Thomas; St. Croix.

## NYMPHAEACEAE

CASTALIA AMPLA (DC.) Salisb. [*Nymphaea ampla* DC.; *N. ampla parvifolia* Eggers.] In rivulets and ponds, St. Croix.

## MENISPERMACEAE

CISSAMPELOS PARIERA L. [*C. microcarpa* DC.] Woods and thickets, St. Thomas; St. Croix; St. Jan.

HYPERBAENA LAURIFOLIA (Poir.) Urban. [*Cissampelos laurifolius* Poir.; *Cocculus laurifolius* of Eggers.] Woodlands, St. Thomas.

HYPERBAENA DOMINGENSIS (DC.) Benth. [*Cocculus domingensis* DC.] Forest, near St. Peter, St. Thomas (according to Eggers). The species is not accredited to St. Thomas by Urban (Symb. Ant. 1: 306). Eggers's record probably refers to *H. laurifolia*.

## ANNONACEAE

OXANDRA LAURIFOLIA (Sw.) A. Rich. [*Uvaria laurifolia* Sw.; *U. excelsa* Vahl.] St. Croix (according to West).

GUATTERIA CARIBAEA Urban. [*G. Ouregou* Griseb., not Dunal.] St. Thomas (according to Grisebach).

ANNONA MURICATA L. Woods and thickets, St. Thomas; St. Jan; St. Croix.

ANNONA PALUSTRIS L. [*A. glabra* L.; *A. laurifolia* Dunal.] Borders of marshes and coastal thickets, St. Thomas; St. Croix.

ANNONA SQUAMOSA L. [*Annona cinerea* Dunal.] Woods, hillsides and thickets, St. Thomas; St. Jan; St. Croix.

ANNONA RETICULATA L. Woods and hillsides, St. Thomas; St. Jan; St. Croix.

ANNONA MONTANA Macf. Fredericksted, St. Croix.

## LAURACEAE

HUFELANDIA PENDULA (Sw.) Nees. [*Laurus pendula* Sw.; *H. thomae* Nees.] St. Thomas (DC. Prodr. 15<sup>1</sup>: 65); recorded from St. Thomas as collected by Riedlé (Mez, Jahrb. Bot. Gart. Berlin 5: 21).

ACRODICLIDIUM SALICIFOLIUM (Sw.) Griseb. Forests, St. Thomas; St. Jan; St. Croix.

PERSEA PERSEA (L.) Cockerell. [*Laurus Persea* L.; *Persea americana* Mill.; *P. gratissima* Gaertn. f.] Spontaneous after planting, St. Thomas; St. Croix.

PHOEBE CUBENSIS Nees. [*P. antillana cubensis* Meissn.; *P. elongata* of Eggers.] St. Croix (West, according to DC. Prodr. 15<sup>1</sup>: 31, and also recorded by Mez).

OCOTEA LEUCOXYLON (Sw.) Mez. [*Laurus leucoxyton* Sw.; *Oreodaphne leucoxyton* Nees.] Forest, Signal Hill, St. Thomas.

OCOTEA FLORIBUNDA (Sw.) Mez. [*Laurus floribunda* Sw.] Wooded hillside, Bordeaux, St. Jan.

NECTANDRA ANTILLANA Meissn. Forests, St. Thomas.

NECTANDRA MEMBRANACEA (Sw.) Griseb. [*Laurus membranacea* Sw.] Dense forests, Signal Hill, St. Thomas; Will's Bay, St. Croix (according to Eggers).

NECTANDRA CORIACEA (Sw.) Griseb. [*Laurus coriacea* Sw.] Forests, St. Thomas; St. Jan; St. Croix.

LAURUS INDICA West, of St. Croix, is unknown to modern botanists.

LAURUS LONGIFOLIA Vahl, collected on St. Croix by West, is not further determined.

CINNAMOMUM ZEYLANICUM Blume is recorded by Eggers as naturalized in a few places in shaded valleys on St. Croix.

#### CASSYTHACEAE

CASSYTHA AMERICANA Nees. Coastal thickets, St. Thomas; St. Croix.

#### PAPAVERACEAE

ARGEMONE MEXICANA L. Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

#### CAPPARIDACEAE

CLEOME SPINOSA Jacq. [*C. pungens* Willd.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

CLEOME GYNANDRA L. [*C. pentaphylla* L.; *Gynandropsis pentaphylla* DC.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

CLEOME VISCOSA L. [*Polanisea icosandra* of Millspaugh.] Waste and cultivated grounds, St. Thomas; St. Croix.

CAPPARIS CYNOPHALLOPHORA L. [*C. jamaicensis* Jacq.; *C. torulosa* of West; *C. jamaicensis marginata* and *siliquosa* Eggers; ? *C. linearis* of West.] Thickets and hillsides, St. Thomas; St. Jan; St. Croix.

CAPPARIS INDICA (L.) Fawc. & Rend. [*Breynia indica* L.; *Capparis Breynia* Jacq.; *C. amygdalina* Lam.; *C. Grisebachii* of Millspaugh.] Thickets, woods and hillsides, St. Thomas; St. Jan; St. Croix.

CAPPARIS BADUCCA L. [*Capparis frondosa* Jacq.] Forests and hillsides, St. Thomas; St. Croix; St. Jan (according to Eggers).

CAPPARIS FLEXUOSA L. [*Capparis cynophallophora* of Eggers and

of Millspaugh; *C. saligna* of West; *C. cynophallophora saligna* Eggers.] Woods, thickets and hillsides, St. Thomas; St. Jan; St. Croix.

CAPPARIS COCCOLOBIFOLIA Mart. [*C. cynophallophora latifolia* Griseb.] Thickets and hillsides, St. Thomas; St. Jan; St. Croix.

CAPPARIS PORTORICENSIS Urban. Hillside thicket between Bethania and Rosenberg, St. Jan.

CAPPARIS VERRUCOSA Jacq. St. Thomas (according to Grisebach); Virgin Islands (according to Eggers).

MORISONIA AMERICANA L. Wooded hillsides, St. Thomas; St. Jan; St. Croix (according to Eggers).

### BRASSICACEAE

LEPIDIUM VIRGINICUM L. [*L. apetalum* of Millspaugh.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

LEPIDIUM SATIVUM L. Cultivated for condiment.

CAKILE LANCEOLATA (Willd.) O. E. Schulz. [*C. aequalis* L'Her.] Coastal sands and rocks, St. Thomas; St. Jan; St. Croix.

SINAPIS ARVENSIS L. Naturalized near Anguilla, St. Croix (according to Eggers).

BRASSICA INTEGRIFOLIA (West) O. E. Schulz. [*Sinapis integrifolia* West; *S. brassicata* Griseb., not L.; *S. juncea* of Millspaugh.] Waste and cultivated grounds, St. Thomas; St. Croix; St. Jan.

BRASSICA OLERACEA L. Cultivated for food.

BRASSICA CAMPESTRIS L. [*B. Rapa* L.] Cultivated for food.

SISYMBRIUM NASTURTIUM L. [*Nasturtium officinale* R. Br.] In rivulets, St. Thomas; St. Croix.

RAPHANUS RAPHANISTRUM L. Recorded by West.

RAPHANUS SATIVUS L. Cultivated for food.

KONIGA MARITIMA (L.) R. Br. [*Clypeola maritima* L.] Cultivated for ornament.

### MORINGACEAE

MORINGA MORINGA (L.) Millsp. [*Guilandina Moringa* L.; *Hyperanthera Moringa* Vahl; *Moringa pterygosperma* Gaertn.] Roadsides and hillsides, St. Thomas; St. Jan; St. Croix.

### CRASSULACEAE

BRYOPHYLLUM PINNATUM (Lam.) Kurz. [*Cotyledon pinnata* Lam.; *B. calycinum* Salisb.] Dry soil, St. Thomas; St. Jan; St. Croix.

### ROSACEAE

A number of different kinds of roses are grown for ornament.

## AMYGDALACEAE

CHRYSOBALANUS ICACO L. Woods, hillsides and thickets, St. Thomas; St. Jan; St. Croix.

## MIMOSACEAE

INGA LAURINA (Sw.) Willd. [*Mimosa laurina* Sw.; *M. laurifolia* of West.] Woodlands and forests, St. Thomas; St. Jan; St. Croix.

PITHECOLOBIUM UNGUIS-CATI (L.) Mart. [*Mimosa unguis-cati* L.; *Inga Unguis-cati* Willd.; *P. Unguis-cati forfex* Griseb.] Thickets, hillsides and pastures, St. Thomas; St. Jan; St. Croix.

ENTEROLOBIUM SAMAN (Jacq.) Prain. [*Mimosa Saman* Jacq.; *Calliandra Saman* Griseb.; *Pithecolobium Saman* Benth.] Roadsides and near settlements, St. Thomas; St. Croix.

ALBIZZIA LEBBECK (L.) Benth. [*Mimosa Lebeck* L.; *M. speciosa* Jacq.; *Acacia Lebeck* Willd.] Fields and hillsides, St. Thomas; St. Croix.

**Anneslia portoricensis** (Jacq.) Britton. [*Mimosa portoricensis* Jacq.; *Calliandra portoricensis* Benth.] Forests, King's Hill, St. Jan.

**Anneslia haematostoma** (Bert.) Britton. [*Acacia haematomma* Bert.; *Calliandra haematomma* Benth.] Flag Hill, St. Thomas.

**Anneslia purpurea** (L.) Britton. [*Calliandra purpurea* Benth.; *Mimosa purpurea* L.; *Inga purpurea* Willd.] Cultivated on St. Croix (according to West).

ACACIA NUDIFLORA Willd. Hillsides and woods, St. Thomas; St. Jan.

ACACIA RIPARIA H.B.K. [*A. sarmentosa* Griseb., not Desv.; *Mimosa paniculata* of West; *A. Westiana* DC.] Hillsides and thickets, St. Thomas; St. Jan; St. Croix (according to West).

ACACIA CATECHU Willd. [*Mimosa catechu* L. f.] Naturalized in shaded valleys, St. Croix.

ACACIA MACRACANTHA H. & B. [*Mimosa lutea* Houst.; *Acacia lutea* Hitchc., not Leavenw.; *A. macracantha glabrens* Eggers.] Hillsides and thickets, St. Thomas; St. Jan; St. Croix.

ACACIA TORTUOSA (L.) Willd. [*Mimosa tortuosa* L.] Hillsides, St. Thomas; St. Croix.

ACACIA ARABICA Willd., is planted for ornament, and is recorded by Eggers as naturalized near dwellings on St. Thomas and St. Croix.

VACHELLIA FARNESIANA (L.) W. & A. [*Mimosa Farnesiana* L.; *Acacia Farnesiana* Willd.] Hillsides and thickets, St. Thomas; St. Jan; St. Croix.

LEUCAENA GLAUCA (L.) Benth. [*Mimosa glauca* L.; *Acacia frondosa* Willd.] Fields and hillsides, St. Thomas; St. Jan; St. Croix.

MIMOSA PUDICA L. Fields and hillsides, St. Thomas; St. Croix.

MIMOSA CERATONIA L. [*M. sensitiva* of West.] Hills and thickets, St. Thomas; St. Jan; ? St. Croix (according to West).

MIMOSA PIGRA L. [*M. asperata* L.] St. Thomas (according to Grisebach), who indicates that he saw a specimen from that island, but the plant has not been found there by recent collectors.

ACUAN VIRGATUM (L.) Medic. [*Mimosa virgata* L.; *Desmanthus virgatus* Willd.; *D. strictus* Bertol.; *D. virgatus strictus* Griseb.; *A. virgatus albiflorus* Kuntze.] Fields and hillsides, St. Thomas; St. Croix.

ACUAN DEPRESSUM (H. & B.) Kuntze. [*Desmanthus depressus* H. & B.] Hillsides, St. Thomas; St. Jan.

NEPTUNIA PUBESCENS Benth. Buck Island, St. Thomas (according to Eggers).

ADENANTHERA PAVONINA L. Naturalized, St. Thomas; St. Jan and St. Croix (according to Eggers); not seen by us on any of the islands, except as a planted tree.

#### CAESALPINACEAE

HYMENAEA COURBARIL L. Woods and hillsides, St. Thomas; St. Jan; St. Croix.

TAMARINDUS INDICA L. In various situations, St. Thomas; St. Jan; St. Croix. Planted for its fruit and for shade.

BAUHINIA TOMENTOSA L. Spontaneous after cultivation, waste grounds, St. Thomas; St. Croix.

BAUHINIA MONANDRA Kurz. [*B. Kappleri* Sagot; *B. Krugii* Urban.] Spontaneous after planting, St. Thomas; St. Croix.

BAUHINIA UNGULA Jacq., recorded by Grisebach as found on St. Thomas, is probably an error in record or determination.

CASSIA FISTULA L. Naturalized in shaded valleys, St. Croix (according to Eggers). Planted for shade and for its fruit.

CASSIA GRANDIS L. Naturalized on St. Thomas and St. Croix.

CASSIA QUINQUANGULATA L. C. Rich. [*C. bacillaris* of Eggers, of Kuntze and of Millsbaugh.] Woods and thickets, St. Thomas.

CASSIA BICAPSULARIS L. Waste grounds and hillsides, St. Thomas; St. Jan; St. Croix.

CASSIA SIAMEA Lam. [*C. florida* Vahl.] Naturalized near towns, St. Thomas (according to Eggers). Planted for shade and ornament.

CASSIA OCCIDENTALIS L. [*C. planisiliqua* L.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

CASSIA TORA L. [*C. obtusifolia* L.] Waste and cultivated grounds, St. Thomas; St. Croix.

CASSIA POLYPHYLLA Jacq. [*C. biflora angustisiliqua* of Eggers.] Hillsides, St. Thomas; St. Croix.

CASSIA OBOVATA Collad. Naturalized on St. Thomas (according to Eggers).

CASSIA HIRSUTA L. Sugar Estate, St. Thomas (according to Eggers).

CASSIA ALATA L. Waste grounds, St. Thomas; St. Jan; St. Croix.

CASSIA AUGUSTIFOLIA Vahl. Planted on St. Croix (according to West).

CASSIA TRIFLORA Vahl, collected on St. Croix by Rohr, is "a doubtful species" according to Eggers; it is not the same as *Cassia triflora* Jacquin, a prior name.

CASSIA GRANDIS L. [*C. mollis* Vahl.] Planted for shade.

CHAMAECRISTA GRAMMICA (Spreng.) Pollard. [*Cassia grammica* Spreng.] Rocky soil, Little St. James Island, St. Jan.

CHAMAECRISTA SWARTZII (Wickstr.) Britton. [*Cassia Swartzii* Wickstr.; *C. glandulosa* of West; *Cassia glandulosa stricta* and *ramosa* of Eggers; *Chamaecrista glandulosa* and *C. glandulosa ramosa* of Millspaugh; *Chamaecrista complexa* Pollard; *Cassia Chamaecrista pubicaulis* Kuntze.] Fields and hillsides, St. Thomas; St. Jan; St. Croix.

CHAMAECRISTA CHAMAECRISTA (L.) Britton. [*Cassia Chamaecrista* L.; *Cassia nictitans* of Eggers and of Millspaugh; *C. diffusa* DC.] Dry, grassy situations, St. Thomas; St. Jan; St. Croix.

PARKINSONIA ACULEATA L. Coastal thickets, St. Thomas; St. Jan; St. Croix.

HAEMATOTOXYLON CAMPECHIANUM L. [*Sabinea florida* of Millspaugh.] Coastal thickets and hillsides, St. Thomas; St. Jan; St. Croix.

DELONIX REGIA (Bojer) Raf. [*Poinciana regia* Bojer.] Spontaneous after planting, St. Thomas; St. Croix.

GUILANDINA CRISTA (L.) Small. [*Caesalpinia Crista* L.; *Guilandina Bonducella* L.] Coastal sands, St. Thomas; St. Jan; St. Croix.

GUILANDINA DIVERGENS (Urban) Britton. [*Caesalpinia divergens* Urban; *Guilandina Bonduc* of Schlechtendal and of Eggers.] Coastal thickets, St. Thomas; St. Jan; St. Croix.

GUILANDINA MELANOSPERMA Eggers. [*Caesalpinia melanosperma* Urban.] Coastal thickets, St. Croix.

CAESALPINIA CORIARIA Willd. [*Poinciana coriaria* Jacq.; *Lebidibia coriaria* Schl.] Hillsides, St. Thomas. Planted on St. Croix.

CAESALPINIA GILLIESII Wall. [*Poinciana Gilliesii* Hook.] Planted for ornament.

CAESALPINIA PUNCTATA Willd. Planted on St. Thomas.



CAESALPINIA SAPPAN L. Recorded by Krebs as planted on St. Thomas.

CAESALPINIA ELATA Sw. Attributed by Eggers to St. Croix, presumably erroneously.

POINCIANA PULCHERRIMA L. [*Caesalpinia pulcherrima* Sw.] Spontaneous after cultivation, St. Thomas; St. Croix.

#### KRAMERIACEAE

KRAMERIA IXINA L. [*K. Ishami* Millsp.] Dry rocky soil, Bovoni and Water Island, St. Thomas.

#### FABACEAE

MYROSPERMUM FRUTESCENS Jacq. Naturalized near dwellings, St. Croix (according to Eggers).

SOPHORA TOMENTOSA L. Coastal sands, St. Thomas; St. Croix.

CROTALARIA RETUSA L. Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

CROTALARIA JUNCEA L. Field at Bassin, St. Croix; recorded by West as cultivated prior to 1793.

CROTALARIA VERRUCOSA L. Waste and cultivated grounds, St. Thomas; St. Croix; St. Jan.

CROTALARIA INCANA L. Waste and cultivated grounds, St. Thomas; St. Croix.

CROTALARIA LOTIFOLIA L. Thickets and hillsides, St. Thomas; St. Jan; St. Croix.

CROTALARIA LABURNIFOLIA L. Cultivated on St. Croix (according to West).

INDIGOFERA SUFFRUTICOSA L. [*I. Anil* L.] Thickets and hillsides, St. Thomas; St. Jan; St. Croix.

INDIGOFERA GUATEMALENSIS Moç. & Sessé. St. Thomas.

INDIGOFERA TINCTORIA L. Thickets, St. Thomas; St. Jan; St. Croix (according to Eggers, who notes its former cultivation).

MEDICAGO SATIVA L. Planted on St. Croix.

PAROSELA DOMINGENSIS (DC.) Millsp. [*Dalea domingensis* DC.; *D. phymatodes* of Eggers.] Dry soil, St. Jan, collected only by Eggers.

CRACCA CINEREA (L.) Morong. [*Galega cinerea* L.; *G. littoralis* L.; *Tephrosia cinerea* Pers.; *Cracca villosa cinerea* Kuntze; *Tephrosia cinerea littoralis* of Eggers.] Dry sandy soil, St. Thomas; St. Jan; St. Croix.

CRACCA PURPUREA L. [*Galega purpurea* L.] Cultivated on St. Croix (according to West).

SABINEA FLORIDA (Vahl) DC. [*Robinia florida* Vahl.] Hillsides and thickets, St. Thomas; St. Jan.

BENTHAMANTHA CARIBAEA (Jacq.) Kuntze. [*Galega caribaea* Jacq.; *Cracca caribaea* Benth; *Brittonamra caribaea* Kuntze.] Thickets and hillsides, St. Thomas; St. Croix.

COURSEZIA ARBOREA Griseb., recorded by Grisebach from St. Jean, is erroneously quoted by Eggers as from St. Jan. There is a place called St. Jean in French Guiana.

SESBAN SERICEA (Willd.) DC. [*Coronilla sericea* Willd.] Thickets, Flag Hill, St. Thomas.

**Sesban Sesban** (L.) Britton. [*Aeschynomene Sesban* L.] Planted on St. Croix.

AGATI GRANDIFLORA (L.) Desv. [*Aeschynomene grandiflora* L.; *Sesbania grandiflora* Pers.] Roadsides and near dwellings, naturalized St. Thomas; St. Jan; St. Croix.

PICTETIA ACULEATA (Vahl) Urban. [*Robinia aculeata* Vahl; *R. squamata* Vahl; *Aeschynomene aristata* Jacq.; *Pictetia squamata* DC.; *P. aristata* DC.] Woods, hillsides and thickets, St. Thomas; St. Jan; St. Croix.

AESCHYNOMENE AMERICANA L. [*Ae. americana depila* Millsp.] Grassy places, St. Thomas; St. Jan; St. Croix.

STYLOSANTHES HAMATA (L.) Taubert. [*Hedysarum hamatum* L.; *Stylosanthes procumbens* Sw.] Dry soil, St. Thomas; St. Croix; St. Jan.

STYLOSANTHES VISCOSA Sw., recorded by West from St. Croix. Eggers thought perhaps a mistake for the preceding species, which is probable.

ARACHIS HYPOGAEA L. Subspontaneous after cultivation, St. Thomas; St. Croix. Hardly persistent.

ZORNIA DIPHYLLA (L.) Pers. [*Hedysarum diphyllum* L.; *Z. reticulata* Smith.] Pastures, high hills of St. Thomas; St. Croix (according to de Candolle).

CODARIOCALYX GYRANS (L. f.) Hassk. [*Hedysarum gyrans* L. f.; *Desmodium gyrans* DC.] Planted for interest.

MEIBOMIA TRIFLORA (L.) Kuntze. [*Hedysarum triflorum* L.; *Desmodium triflorum* DC.; *Meibomia triflora pilosa* Kuntze.] Fields and moist grassy places, St. Thomas; St. Jan; St. Croix.

MEIBOMIA SUPINA (Sw.) Britton. [*Hedysarum supinum* Sw.; *H. incanum* Sw.; *Desmodium supinum* DC.; *D. incanum* DC.] Fields, hillsides, woods and thickets, St. Thomas; St. Jan; St. Croix.

MEIBOMIA AXILLARIS (Sw.) Kuntze. [*Hedysarum axillare* Sw.; *Desmodium axillare* DC.] Shaded banks and ravines, St. Croix.

MEIBOMIA MOLLIS (Vahl) Kuntze. [*Hedysarum molle* Vahl; *Desmodium molle* DC.] Grassy places, St. Thomas; St. Croix.

MEIBOMIA SPIRALIS (Sw.) Kuntze. [*Hedysarum spirale* Sw.; *Des-*

*modium spirale* DC.] Hillsides and banks, St. Thomas; St. Jan; St. Croix.

MEIBOMIA TORTUOSA (Sw.) Kuntze. [*Hedysarum tortuosum* Sw.; *Desmodium tortuosum* DC.] Banks, hillsides and thickets, St. Thomas; St. Croix.

MEIBOMIA SCORPIURUS (Sw.) Kuntze. [*Hedysarum scorpiurus* Sw.; *Desmodium scorpiurus* Desv.] Grassy places, St. Thomas (according to Grisebach); St. Croix (according to Eggers).

LOUREA VESPERTILIONIS (L.) Desv. [*Hedysarum vesperilionis* L.] Naturalized in gardens, St. Thomas; St. Croix (according to Eggers). Planted for ornament.

ALYSICARPUS NUMMULARIFOLIUS (L.) DC. [*Hedysarum nummularifolium* L.; *H. vaginale* L.; *Alysicarpus vaginalis* DC.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

**Ecastophyllum Ecastophyllum** (L.) Britton. [*Hedysarum Ecastophyllum* L.; *Pterocarpus Ecastophyllum* of West; *Ecastophyllum Brownei* Pers.; *Dalbergia Ecastophyllum* Taubert.] Coastal thickets, St. Thomas; St. Jan; St. Croix.

DREPANOCARPUS LUNATUS (L. f.) Meyer. [*Pterocarpus lunatus* L. f.] Coastal thickets, St. Thomas; St. Croix (according to West and to Eggers).

ICHTHYOMETHIA PISCIPULA (L.) Hitchc. [*Erythrina Piscipula* L.; *Piscidia Erythrina* L.; *P. Piscipula* Sargent.] Thickets and woodlands, St. Thomas; St. Jan; St. Croix.

ANDIRA JAMAICENSIS (W. Wright) Urban. [*Geoffraea jamaicensis* (inermis) W. Wright; *G. inermis* Sw.; *Andira inermis* H.B.K.; *Vouacapoua americana* of Millspaugh.] Woods and along rivulets, St. Thomas; St. Jan; St. Croix.

ABRUS ABRUS (L.) W. F. Wight. [*Glycine Abrus* L.; *Abrus praecatorius* L.] Thickets and hedges, St. Thomas; St. Jan; St. Croix.

CLITORIA TERNATEA L. [*Ternatea vulgaris* H.B.K.] Thickets and hedges, St. Thomas; St. Jan; St. Croix.

BRADBURYA VIRGINIANA (L.) Kuntze. [*Clitoria virginiana* L.; *Centrosema virginianum* Benth.; *C. virginianum angustifolium* Griseb.] Banks, fields and hillsides, St. Thomas; St. Jan; St. Croix.

BRADBURYA PLUMIERI (Turp.) Kuntze. [*Clitoria Plumieri* Turp.; *Centrosema Plumieri* Benth.] Sugar Estate, St. Thomas.

TERAMNUS LABIALIS Spreng. [*T. uncinatus albiflorus* Eggers.] Thickets, St. Thomas; St. Jan; St. Croix.

ERYTHRINA CORALLODENDRON L. Hillsides, St. Thomas; St. Croix. Planted for shade and ornament.

ERYTHRINA HORRIDA Eggers. Hillside, Flag Hill, St. Thomas. Recorded from all three islands by Eggers.

MUCUNA PRURIENS (L.) DC. [*Dolichos pruriens* L.] Shaded valleys and rocky banks, St. Thomas; St. Croix.

GALACTIA DUBIA DC. [*G. tenuiflora* of Eggers, partly; *G. regularis* of Millspaugh; *G. dubia Ehrenbergii* Urban; *G. filiformis minor* + *villosa* f. *albida* Kuntze.] Hillsides and thickets, St. Thomas; St. Jan; St. Croix.

GALACTIA STRIATA (Jacq.) Urban. [*Glycine striata* Jacq.; *G. striata tomentosa* Urban; *G. filiformis* of Eggers; *G. tenuiflora* of Millspaugh.] Thickets, St. Thomas; St. Jan; St. Croix.

GALACTIA EGGERSII Urban. [*G. tenuiflora* of Eggers; *G. pendula* of Knox.] Hillside, Flag Hill, St. Thomas; Bordeaux, St. Jan. Endemic.

CANAVALI RUSIOSPERMA Urban. [*C. parviflora* of Eggers.] Forest, Signal Hill, St. Thomas.

CANAVALI ENSIFORMIS (L.) DC. [*Dolichos ensiformis* L.; *C. gladiata ensiformis* of Eggers.] Naturalized in provision grounds, Signal Hill, St. Thomas (according to Eggers). Cultivated for its seeds.

CANAVALI LINEATA (Thunb.) DC. [*Dolichos lineatus* Thunb.; *D. rotundifolius* Vahl; *Dolichos obtusifolius* Lam.; *Canavalia obtusifolia* DC.] Coastal sands, St. Thomas; St. Jan; St. Croix.

CAJAN CAJAN (L.) Millsp. [*Cytisus Cajan* L.; *Cajanus flavus* DC.; *Cajanus indicus* Spreng.] Spontaneous after cultivation, St. Thomas; St. Jan; St. Croix.

DOLICHOLUS RETICULATUS (Sw.) Millsp. [*Glycine reticulata* Sw.; *Rhynchosia reticulata* DC.; *R. reticulata latifolia* Kuntze.] Roadsides and thickets, St. Thomas; St. Jan; St. Croix.

DOLICHOLUS PHASEOLOIDES (Sw.) Kuntze. [*Glycine phaseoloides* Sw.; *Rhynchosia phaseoloides* DC.] Forest, Signal Hill, St. Thomas (according to Eggers).

DOLICHOLUS MINIMUS (L.) Medic. [*Dolichos minimus* L.; *Rhynchosia minima* DC.; *R. punctata* DC.; *R. minima lutea* Eggers; *D. minimus luteus* Millsp.] Banks, hillsides and thickets and in cultivated ground, St. Thomas; St. Jan; St. Croix.

PHASEOLUS LUNATUS L. Thickets, spontaneous after cultivation, St. Thomas; St. Jan; St. Croix.

PHASEOLUS VULGARIS L. Spontaneous after cultivation, St. Thomas; St. Jan; St. Croix.

PHASEOLUS LATHYROIDES L. [*P. semierectus* L.] Banks, fields and hillsides, St. Thomas; St. Jan; St. Croix.

PHASEOLUS ALATUS L., recorded from St. Croix by West, is not further determined.

VIGNA REPENS (L.) Kuntze. [*Dolichos repens* L.; ? *D. luteus* of

West; *Dolichos luteolus* Jacq.; *Vigna luteola* Benth.; *Bradburya pubescens* of Millspaugh, St. Thomas.] Moist thickets, St. Thomas; St. Jan; St. Croix.

VIGNA UNGUICULATA (L.) Walp. [*Dolichos unguiculatus* L.; *D. Catjang* L.; *Vigna Catjang* Walp.] Edge of a cornfield near Doily Hill, St. Croix; St. Thomas (according to Schlechtendal).

PACHYRRHIZUS EROSUS (L.) Urban. [*Dolichos erosus* L.; *Pachyrrhizus angulatus* L. C. Rich.] Hillside thickets, St. Thomas.

DOLICHOS LABLAB L. [*Lablab vulgaris* Savi; *Dolichos benghalensis* Jacq.; *Dolichos Lablab abliflorus* (DC.) Millsp.] Thickets and spontaneous after cultivation, St. Thomas; St. Jan; St. Croix.

DOLICHOS SPHAEROSPERMUS (L.) DC. [*Phaseolus sphaerospermus* L.] Cultivated for its seeds.

DOLICHOS SESQUIPEDALIS L. Cultivated for its seeds.

BROWNEA COCCINEA Jacq. Planted on St. Croix (according to West).

PISUM SATIVUM L. Cultivated for its seeds.

#### OXALIDACEAE

IONOXALIS INTERMEDIA (A. Rich.) Small. [*Oxalis intermedia* A. Rich.; *O. latifolia* of Millspaugh.] Cultivated grounds, St. Croix.

IONOXALIS MARTIANA (Zucc.) Small. [*Oxalis Martiana* Zucc.] Shaded banks, St. Thomas; cultivated grounds, St. Croix.

XANTHOXALIS CORNICULATA (L.) Small. [*Oxalis corniculata* L.; *O. corniculata microphylla* of Eggers.] Dry soil, St. Thomas; St. Jan; St. Croix.

#### GERANIACEAE

*Pelargoniums* are cultivated for ornament.

#### BALSAMINACEAE

IMPATIENS BALSAMINA L. [*Balsamina hortensis* Desp.] Grown in flower gardens.

#### ERYTHROXYLACEAE

ERYTHROXYLON BREVIPES DC. [*E. ovatum* of Eggers, of Millspaugh, and of Kuntze; *E. areolatum* of West.] Hillsides and thickets, St. Thomas; St. Croix.

ERYTHROXYLON AREOLATUM L. is doubtfully attributed to St. Thomas by O. E. Schulz.

#### ZYGOPHYLLACEAE

GUAIAECUM OFFICINALE L. Woods and thickets, St. Thomas; formerly on St. Croix and St. Jan. Nearly exterminated. Planted on St. Thomas.

TRIBULUS CISTOIDES L. [*T. terrester cistoides* Oliver.] Dry soil, St. Croix.

KALLSTROEMIA MAXIMA (L.) T. & G. [*Tribulus maximus* L.] Waste and cultivated grounds, St. Thomas; St. Croix; St. Jan.

### RUTACEAE

ZANTHOXYLUM PUNCTATUM Vahl. [*Fagara trifoliata* Sw.; *Tobinia punctata* Griseb.] Thickets and banks, St. Croix.

ZANTHOXYLUM THOMASIANUM Krug & Urban. [? *Tobinia spinosa* of Eggers.] Forest, Flag Hill, St. Thomas; St. Jan. Endemic.

ZANTHOXYLUM SPINIFEX (Jacq.) DC. [*Fagara spinifex* Jacq.; *F. tragodes* of West; *Zanthoxylum microphyllum* Desv.] Thickets, St. Croix.

ZANTHOXYLUM MONOPHYLLUM (Lam.) P. Wilson. [*Fagara monophylla* Lam.; *Zanthoxylum simplicifolium* Vahl; *Z. Ochroxylum* DC.] Hillsides, woods and thickets, St. Thomas; St. Jan; St. Croix.

ZANTHOXYLUM MARTINICENSE (Lam.) DC. [*Fagara martinicensis* Lam.; *Zanthoxylum Clava-Herculis* of Eggers.] Woods and hillsides, St. Thomas; St. Jan; St. Croix.

ZANTHOXYLUM FLAVUM Vahl. [*Fagara flava* Krug & Urban.] Bordeaux Hills, St. Jan, nearly extinct (according to Eggers). Not found by us on St. Jan in 1913.

PILOCARPUS RACEMOSUS Vahl. Forest, King's Hill, St. Jan.

AMYRIS ELEMIFERA L. [*A. maritima* Jacq.; *A. sylvatica* of Eggers.] Woods and thickets, St. Thomas; St. Jan; St. Croix (according to Eggers).

CHALCAS EXOTICA (L.) Millsp. [*Murraya exotica* L.] Spontaneous after cultivation, St. Thomas; St. Croix.

TRIPHASIA TRIFOLIA (Burm. f.) P. Wilson. [*Limonia trifolia* Burm. f.; *T. trifoliata* (L.) DC.] Spontaneous after cultivation, naturalized in thickets, St. Thomas; St. Jan; St. Croix.

CITRUS MEDICA L. Recorded by Eggers as naturalized in gardens.

CITRUS LIMA Lunan. [*C. medica Limonum* of Eggers; *C. Limetta* Wight.] Woodlands and thickets, naturalized, St. Thomas; St. Jan; St. Croix.

CITRUS AURANTIUM L. Occasionally spontaneous after planting, St. Thomas; St. Croix.

CITRUS VULGARIS Risso. [*C. Bigaradia* Loisel.; *C. Aurantium bigaradia* Griseb.] Occasionally spontaneous after planting, St. Thomas; St. Croix.

CITRUS DECUMANA L. Planted for its fruit.

CITRUS BUXIFOLIA Poir. Planted for its fruit (according to Eggers).

CLAUSENA WAMPI Blanco. [*Cookia punctata* Sonn.] Planted for shade.

### SURIANACEAE

SURIANA MARITIMA L. Coastal sands, St. Thomas; St. Jan; St. Croix.

### SIMAROUBACEAE

QUASSIA AMARA L. Naturalized in and about gardens, St. Thomas; St. Croix. Planted for shade.

CASTELARIA NICHOLSONI (Hook.) Small. [*Castela Nicholsoni* Hook.; *C. erecta* of Eggers and of Millspaugh.] Thickets, St. Croix.

AESCHRION ANTILLANA (Eggers) Small. [*Rhus antillana* Eggers; *Quassia excelsa* of West; *Picrasma antillana* Urban; *Picraena excelsa* of Eggers and of Millspaugh.] Forests, St. Thomas; St. Jan; St. Croix.

### BURSERACEAE

ELAPHRUM SIMARUBA (L.) Rose. [*Pistacia Simaruba* L.; *Bursera gummifera* L.; *Bursera Simaruba* Sargent.] Woods and hills, St. Thomas; St. Jan; St. Croix.

TETRAGASTRIS BALSAMIFERA (Sw.) Kuntze. [*Hedwigia balsamifera* Sw.; ? *Icica altissima* of West.] St. Croix (according to West).

### MELIACEAE

SWIETENIA MAHAGONI Jacq. Hillsides and valleys, St. Thomas; St. Croix. Often planted; perhaps not native.

MELIA AZEDARACH L. Roadsides; occasional in woods, St. Thomas; St. Jan; St. Croix.

TRICHILIA HIRTA L. [*T. spondioides* Jacq.] Woods, thickets and hillsides, St. Thomas; St. Jan; St. Croix.

TRICHILIA WAWRANA ANTILLANA C. DC., described as from St. Croix from a specimen in the Copenhagen herbarium, is otherwise unknown.

GUAREA TRICHILIOIDES L., was recorded by West from St. Croix, but the record was questioned by Eggers. It is abundant in Porto Rico.

### MALPIGHIACEAE

HIRAEA FAGINEA (Sw.) Ndz. [*H. faginea glandulifera* Ndz.], recorded by Niedenzu from St. Thomas, is probably an error in locality.

BANISTERIA PURPUREA L. [*Heteropteris purpurea* H.B.K.; *H. parvifolia* DC.] Thickets and hillsides, St. Thomas; St. Jan; St. Croix.

BANISTERIA LAURIFOLIA L. [*Heteropteris laurifolia* A. Juss.; *B. laurifolia antillana* Ndz., *B. lancifolia* of West.] St. Croix (according to Niedenzu).

STIGMAPHYLLON LINGULATUM (Poir.) Small. [*Triopteris lingulata* Poir.; *Banisteria periplocifolia* Desf.; *Stigmaphyllon periplocifolium* A. Juss.; *S. Sagraeanum* of Millspaugh.] Thickets and hillsides, St. Thomas; St. Jan; St. Croix.

STIGMAPHYLLON CORDIFOLIUM Ndz. St. Thomas (according to Niedenzu).

STIGMAPHYLLON CILIATUM (Lam.) A. Juss., recorded by Niedenzu from St. Thomas, as collected by Finlay, was really from Trinidad.

STIGMAPHYLLON TOMENTOSUM (Desf.) Ndz. [*Banisteria tomentosa* Desf.] Royiers, St. Jan (according to Niedenzu).

SPACHEA LITTORALIS A. Juss., recorded by A. Jussieu as collected by Finlay on St. Thomas, was from Trinidad.

THRYALLIS GLAUCA (Cav.) Kuntze. [*Galphimia glauca* Cav.; *G. gracilis* Bartl.] Roadsides and about dwellings, naturalized, St. Thomas; St. Croix.

TETRAPTERIS INAEQUALIS Cav. St. Croix (according to Niedenzu).

MALPIGHIA FUCATA Ker. [*M. fucata elliptica* Ndz.] St. Croix (according to Eggers).

MALPIGHIA GLABRA L. [*M. glabra antillana* Urban & Ndz.] Thickets, St. Thomas; St. Croix (according to Eggers and to Niedenzu).

MALPIGHIA PUNICIFOLIA L. [*M. puniceifolia vulgaris* and *lancifolia* Ndz.; *M. glabra* of Millspaugh.] Hillsides and thickets, St. Thomas; St. Croix.

MALPIGHIA LINEARIS Jacq. [*M. angustifolia* L.; *M. angustifolia oblongata* Ndz.; ? *M. urens lanceolata* Eggers.] Hillside thickets, Water Island, St. Thomas; St. Jan.

MALPIGHIA BIFLORA Poir. [*M. oxycocca Grisebachiana* Ndz.] St. Croix (according to Niedenzu).

MALPIGHIA PALLENS Small. [*M. urens* of Millspaugh? and of Eggers.] Thickets along sandy beaches, St. Croix. Endemic.

MALPIGHIA INFESTISSIMA (A. Juss.) Rich. [*M. urens* of West; *M. urens infestissima* A. Juss.; *M. Cnide* of Eggers.] Hillside thickets, Water Island, St. Thomas; St. Jan. Also on Vieques and Culebra. Endemic. St. Thomas is the type locality.

BUNCHOSIA GLANDULOSA (Cav.) DC. [*Malpighia glandulosa* Cav.; *M. Swartziana* of Eggers.] Thickets, St. Thomas; St. Jan; St. Croix.

BYRSONIMA SPICATA (Cav.) DC. [*B. coriacea* of Millspaugh.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

BYRSONIMA CUNEATA (Turcz.) P. Wilson. [*B. lucida* DC.] St. Thomas (according to de Candolle, and cited also by Niedenzu).



BYRSONIMA MARTINICENSIS Krug & Urban. St. Croix (according to Small).

## POLYGALACEAE

POLYGALA ANGUSTIFOLIA H.B.K. Thickets, southern side of St. Thomas.

SECURIDACA BROWNEI Griseb. [*S. scandens* West.] Naturalized around Christiansted, St. Croix, and on St. Thomas (according to Eggers).

SECURIDACA ERECTA L. Dry soil, St. Croix; St. Thomas (according to de Candolle).

## EUPHORBIACEAE

SAVIA SESSILIFLORA (Sw.) Willd. [*Croton sessiliflorum* Sw.] Thickets and hillsides, St. Thomas; St. Jan; St. Croix.

**Asterandra grandifolia** (L.) Britton. [*Phyllanthus grandifolius* L.] St. Thomas (according to Urban).

PHYLLANTHUS NIRURI L. Waste and cultivated grounds, St. Thomas; St. Croix.

PHYLLANTHUS ACUMINATUS Vahl is accredited to St. Thomas by Mueller (DC. Prodr. 15<sup>2</sup>: 381) who records a specimen in the Candolle herbarium, but the shrub is not known to inhabit St. Thomas now.

CICCA DISTICHA L. [*Phyllanthus distichus* Muell. Arg.] Spontaneous after planting, St. Thomas; St. Jan; St. Croix.

MARGARITARIA NOBILIS L. f. [*Phyllanthus nobilis* Muell. Arg.; *Cicca antillana* A. Juss.; *P. nobilis antillanus* Muell. Arg.] Forests, St. Thomas; St. Jan; St. Croix (according to Eggers).

SECURINEGA ACIDOTHAMNUS (Griseb.) Muc<sup>1</sup>. Arg. [*Adelia Acidoton* of West; *Flueggea Acidothamnus* Griseb.] Thickets, St. Thomas; Little St. James Island, St. Jan; eastern St. Croix (according to Eggers).

DRYPETES GLAUCA Vahl. St. Croix (according to Eggers).

CROTON ASTROITES Dryand. [*C. phlomoides* Pers.] Thickets, St. Thomas; St. Jan; St. Croix.

CROTON BETULINUS Vahl. Thickets, St. Thomas; St. Jan; St. Croix.

CROTON FLAVENS L. [*C. balsamifer* Jacq.; *C. flavens rigidus* Muell. Arg.; *Oxydectes flavens* Kuntze.] Thickets, St. Thomas; St. Jan; St. Croix.

CROTON DISCOLOR Willd. Rocky thickets, St. Thomas; St. Croix.

CROTON LOBATUS L. [*Oxydectes lobata* Kuntze.] Waste and cultivated grounds, St. Thomas; St. Croix; St. Jan.

CROTON HUMILIS L. Hillside thickets, St. Thomas.

CROTON GLANDULOSUS L. St. Croix (according to Urban).

CROTON OVALIFOLIUS Vahl. [*Oxydectes ovalifolia* Kuntze.] Hillsides, St. Thomas; St. Jan; St. Croix.

CROTON HASTATUS West, of St. Croix (hyponym) is not identified. An arboreus Croton, not found in flower, occurred on Flag Hill, St. Thomas, according to Eggers.

DITAXIS FASCICULATA Vahl. [*Argyrothamnia fasciculata* Muell. Arg.] Thickets, St. Thomas; St. Jan; St. Croix.

ARGYTHAMNIA CANDICANS Sw. Thickets and hillsides, St. Thomas; St. Jan; St. Croix.

RICINELLA RICINELLA (L.) Britton. [*Adelia Ricinella* L.; *R. pedunculosa* Muell. Arg.] Hillsides and thickets, St. Thomas; St. Jan; St. Croix.

ACALYPHA PORTORICENSIS Muell. Arg. Rocky slopes, St. Croix.

ACALYPHA CHAMAEDRIFOLIA (Lam.) Muell. Arg. [*Croton chamaedrifolius* Lam.; *Acalypha reptans* Sw.; *A. corchorifolia* Willd.; *A. chamaedrifolia genuina* and *brevipes* of Eggers.] Rocky soil, St. Thomas; St. Croix.

ACALYPHA POLYSTACHYA Jacq. St. Thomas (according to Eggers). The record is probably an error in determination.

TRAGIA VOLUBILIS L. Thickets, banks and hillsides, St. Thomas; St. Jan; St. Croix.

DALECHAMPIA SCANDENS L. Thickets, St. Thomas; St. Jan; St. Croix.

RICINUS COMMUNIS L. Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

ALEURITES MOLUCCANA (L.) Willd. [*Jatropha moluccana* L.] Roadsides and near dwellings, St. Thomas; St. Croix.

JATROPHA CURCAS L. Hillsides and near dwellings, St. Thomas; St. Jan; St. Croix.

JATROPHA GOSSYPIFOLIA L. [*Adenoropium gossypifolium* Pohl; *J. gossypifolia staphisagriaefolia* and *elegans* of Eggers.] In dry soil, fields and hillsides, St. Thomas; St. Jan; St. Croix.

JATROPHA MULTIFIDA L. Roadsides and planted in gardens, St. Thomas; St. Croix.

JATROPHA PANDURAEFOLIA Andr. Planted for ornament.

MANIHOT MANIHOT (L.) Cockerell. [*Jatropha Manihot* L.] Spontaneous or persistent after cultivation, St. Thomas; St. Jan; St. Croix.

SAPIUM LAUROCERASUS Desf. [*Excoecaria Laurocerasus* Muell. Arg.; ? *E. Laurocerasus laurifolia* of Eggers.] A high tree in forests, Cinnamon Bay, St. Jan, not seen flowering (according to Eggers). Otherwise known only from Porto Rico.

HIPPOMANE MANCINELLA L. Coastal woods, St. Thomas; St. Croix.

GYMNANTHES LUCIDA Sw. [*Sebastiania lucida* Muell. Arg.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

HURA CREPITANS L. Woods, roadsides and near dwellings, St. Thomas; St. Jan; St. Croix.

CHAMAESYCE VAHLII (Willd.) P. Wilson. [*Euphorbia VahlII* Willd.] Rocky hills, Little St. James Island, St. Jan.

CHAMAESYCE BUXIFOLIA (Lam.) Small. [*Euphorbia buxifolia* Lam.; *E. glabrata* Sw.] Coastal sands, St. Thomas; St. Jan; St. Croix.

CHAMAESYCE ARTICULATA (Aubl.) Britton. [*Euphorbia articulata* Aubl.; *E. linearis* Retz.; *E. linearis heterophylla* Kuntze.] Coastal rocks, St. Thomas; St. Jan; St. Croix (according to Retzius and reported by Eggers).

CHAMAESYCE HIRTA (L.) Millsp. [*Euphorbia hirta* L.; *E. pilulifera* L.; *E. pilulifera procumbens* Boiss.] Roadsides, banks and cultivated grounds, St. Thomas; St. Jan; St. Croix.

CHAMAESYCE HYPERICIFOLIA (L.) Millsp. [*Euphorbia hypericifolia* L.; *E. hypericifolia hyssopifolia* of Eggers.] Fields, banks and cultivated grounds, St. Thomas; St. Jan; St. Croix.

CHAMAESYCE SERPENS (H.B.K.) Small. [*Euphorbia serpens* H.B.K.] Dry soil, St. Thomas.

CHAMAESYCE PROSTRATA (Ait.) Small. [*Euphorbia prostrata* Ait.; ? *Chamaesyce* of West.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

CHAMAESYCE BRASILIENSIS (Lam.) Small. [*Euphorbia brasiliensis* Lam.] Grassy places near Charlotte Amalia, St. Thomas, determined by Millspaugh.

EUPHORBIA THYMIFOLIA Burm. is recorded by Eggers from all the islands, but has not been found on any of them by other collectors, and his determination of the species is therefore doubted.

AKLEMA PETIOLARIS (Sims.) Millsp. [*Euphorbia petiolaris* Sims.; ? *E. cotinifolia* of West and of Schlechtendal.] Hillsides and thickets, St. Thomas; St. Jan; doubtfully recorded from St. Croix.

POINSETTIA HETEROPHYLLA (L.) Kl. & Garcke. [*Euphorbia heterophylla* L.; *E. heterophylla linifolia* Kuntze.] Dry rocky situations, St. Thomas.

POINSETTIA CYATHOPHORA (Murr.) S. Brown. [*Euphorbia cyathophora* Murr.; *E. heterophylla cyathophora* Griseb.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

POINSETTIA OERSTEDIANA Kl. & Garcke. [*Euphorbia geniculata* of Eggers; *Euphorbia Oerstediana* Boiss.] Grassy places, St. Thomas; St. Croix.

POINSETTIA PULCHERRIMA (Willd.) Graham. [*Euphorbia pulcherrima* Willd.] Planted for ornament.

EUPHORBIA NERIIFOLIA L. Planted for ornament.

EUPHORBIA SPLENDENS Bojer. Planted for ornament.

EUPHORBIA ANTIQUORUM L. Cultivated (according to Eggers).

PEDILANTHUS TITHYMALOIDES (L.) Poit. [*Euphorbia tithymaloides* L.] Persistent after cultivation, St. Thomas. Grown in flower gardens.

PEDILANTHUS PADIFOLIUS (L.) Poit. [*Euphorbia tithymaloides padifolia* L.] Thickets in dry stony ground, St. Croix.

PEDILANTHUS ANGUSTIFOLIUS Poit. Thickets and hillsides, St. Thomas; St. Jan.

CODIAEUM VARIEGATUM Blume. Planted for ornament.

### BUXACEAE

TRICERA VAHLII (Baill.) Britton. [*Buxus VahlII* Baill.; *Tricera laevigata sanctae-crucis* Eggers.] On limestone, Stony Ground, St. Croix. Known otherwise only on Porto Rico.

MANGIFERA INDICA L. Spontaneous after planting, St. Thomas; St. Jan; St. Croix.

ANACARDIUM OCCIDENTALE L. Woods, hillsides and along roads, St. Thomas; St. Jan; St. Croix.

SPONDIAS PURPUREA L. Spontaneous after planting, St. Thomas; St. Jan; St. Croix.

SPONDIAS MOMBIN L. [*Spondias lutea* L.] Woods, hills and roadsides, St. Thomas; St. Jan; St. Croix.

SPONDIAS DULCIS Forst. f. Cultivated on St. Croix.

COMOCLADIA DODONAEA (L.) Urban. [*Ilex Dodonaea* L.; *Comocladia ilicifolia* Sw.] Rocky coastal thickets, St. Thomas; St. Jan; St. Croix.

### CELASTRACEAE

MAYTENUS ELLIPTICA (Lam.) Krug & Urban. [*Senecia elliptica* Lam.; *Rhamnus laevigatus* Vahl; *Ceanothus laevigatus* DC.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

MAYTENUS CYMOSA Krug & Urban. [*M. elacodendroides* of Eggers.] Thickets, St. Thomas; St. Croix. Known otherwise only from Vieques. Endemic.

RHACOMA CROSSOPETALON L. [*Myginda pallens* Sw.; *M. latifolia* Vahl, not Sw.] Thickets, St. Thomas; St. Jan; St. Croix.

MYGINDA LATIFOLIA (Sw.) Urban. [*Myginda latifolia* Sw.] Thickets, St. Thomas.

SCHAEFFERIA FRUTESSENS Jacq. [*S. completa* Sw.] Thickets, St. Thomas; St. Jan; St. Croix.

ELAEODENDRON XYLOCARPUM (Vahl) Urban. [*Cassine xylocarpa*

Vent.; *Celastrus polygamus* Vahl; *Rhamnus polygamus* West.] Coastal thickets, St. Thomas; St. Jan; St. Croix.

## HIPPOCRATEACEAE

HIPPOCRATEA VOLUBILIS L. is doubtfully accredited to St. Thomas by Urban (Symb. Ant. 4: 367).

## SAPINDACEAE

SERJANIA POLYPHYLLA (L.) Schum. [*Paullinia polyphylla* L.; *S. lucida* Schum.; *Paullinia curassavica* of West.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

PAULLINIA PINNATA L. St. Thomas (according to Radlkofer).

Dr. Millspaugh records *Paullinia frutescens glabrescens* (L.) Radlk. from Midland, St. Croix, as perhaps cultivated.

CARDIOSPERMUM HALICACABUM L. Banks and thickets, spontaneous after cultivation, St. Thomas; St. Croix.

CARDIOSPERMUM MICROCARPUM H.B.K. Thickets, St. Thomas; St. Jan; St. Croix.

CARDIOSPERMUM CORINDUM L. Hillsides, St. Croix.

CARDIOSPERMUM BIPINNATUM West, is not known to modern botanists.

ALLOPHYLUS OCCIDENTALIS (Sw.) Radlk. [*Schmeidelia occidentalis* Sw.] Forests, St. Croix.

SAPINDUS SAPONARIA L. [*S. inaequalis* DC.] Forests, St. Thomas; St. Jan; St. Croix.

MELICOCCA BIJUGA L. Hillsides, woods and along roads, St. Thomas; St. Jan; St. Croix. Planted and naturalized.

CUPANIA TRIQUETRA A. Rich. [*C. fulva* of Eggers.] Woods and hills, St. Thomas; St. Jan.

BLIGHIA SAPIDA Koen. Planted for its fruit.

## DODONAEACEAE

DODONAEA VISCOSA L. Coastal thickets, St. Thomas; St. Croix.

## RHAMNACEAE

KRUGIODENDRON FERREUM (Vahl) Urban. [*Rhamnus ferreus* Vahl; *Ceanothus ferreus* DC.; *Condalia ferrea* Griseb.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

REYNOSIA UNCINATA Urban. [*R. mucronata* of Eggers.] Coastal thickets near Tague Bay, St. Croix.

REYNOSIA GUAMA Urban. [*R. latifolia* of Eggers.] Hillside thickets, St. Thomas; St. Jan. Endemic.

SARCOMPHALUS RETICULATUS (Vahl) Urban. [*Paliurus reticulatus* Vahl; *Zizyphus reticulatus* Vahl.] Thickets, Fair Plain, St. Croix.

COLUBRINA COLUBRINA (Jacq.) Millsp. [*Rhamnus Colubrina* Jacq.; *Colubrina ferruginosa* Brongn.] Coastal thickets and hillsides, St. Thomas; St. Jan; St. Croix.

COLUBRINA RECLINATA (L'Her.) Brongn. [*Rhamnus reclinatus* L'Her.; *R. ellipticus* Sw.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

GOUANIA LUPULOIDES (L.) Urban. [*Banisteria lupuloides* L.; *Gouania domingensis* L.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

ZIZYPHUS JUJUBA (L.) Lam. [*Rhamnus Jujuba* L.] Planted for its fruit.

RHAMNUS GLABRATUS West. A species not understood by modern botanists.

#### VITACEAE

VITIS TILIIFOLIA H. & B. [*V. caribaea* DC.] Forests, St. Thomas.

VITIS VINIFERA L. Planted for its fruit.

CISSUS SICYOIDES L. Woods, walls and thickets, St. Thomas; St. Jan; St. Croix.

CISSUS TRIFOLIATA L. [*C. acida* L.] Dry thickets, St. Thomas; St. Jan; St. Croix.

CISSUS CAUSTICA Tuss. [*C. trifoliata* of Eggers and of Millspaugh.] On trees and rocks, St. Thomas; St. Croix.

CISSUS OBOVATA Vahl. St. Croix. Known otherwise from St. Martin and eastern Porto Rico.

#### TILIACEAE

CORCHORUS ACUTANGULUS L. Waste and cultivated grounds, St. Thomas; St. Croix.

CORCHORUS SILIQUOSUS L. Thickets, fields, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

CORCHORUS HIRTUS L. Gardens and roadsides, St. Thomas and St. Croix (according to Eggers).

CORCHORUS HIRSUTUS L. Coastal thickets and hillsides, St. Thomas; St. Jan; St. Croix.

TRIUMFETTA EXCISA Urban. Bassin yard, St. Croix. Known otherwise only from Porto Rico.

TRIUMFETTA RHOMBOIDEA Jacq. Thickets, St. Croix.

TRIUMFETTA SEMITRILOBA Jacq. [*T. althaeoides* Lam.; *T. semitriloba havanensis* Millsp.] Woods, banks and thickets, St. Thomas; St. Jan; St. Croix.

TRIUMFETTA LAPPULA L. Thickets, St. Thomas; St. Jan; St. Croix.

SLOANEA DENTATA L. Planted on St. Croix (according to West).

## MALVACEAE

ABUTILON UMBELLATUM (L.) Sweet. [*Sida umbellata* L.] Rocky thickets and hillsides, St. Thomas; St. Jan; St. Croix.

ABUTILON HIRTUM (Lam.) Sweet. [*Sida hirta* Lam.; *Abutilon indicum hirtum* Griseb.; *A. graveolens* of Millspaugh.] Waste and cultivated grounds, St. Thomas; St. Croix.

ABUTILON INDICUM (L.) Sweet. [*Sida indica* L.; *A. subpapyraceum* Hochreutiner.] Sandy waste grounds, St. Thomas; St. Croix.

ABUTILON LIGNOSUM A. Rich. St. Thomas and St. Croix (according to Eggers).

GAYOIDES CRISPUM (L.) Small. [*Sida crispa* L.; *Abutilon crispum* Medic.] Sandy soil, St. Thomas.

WISSADULA AMPLISSIMA (L.) R. E. Fries. [*Sida amplissima* L.; ? *Abutilon periplocifolium albicans* of Eggers; *Sida hernandioides* L'Her.; *W. hernandioides* Garcke.] Banks and thickets, St. Jan; St. Croix.

WISSADULA PERIPLOCIFOLIA (L.) Griseb. [*Sida periplocifolia* L.; *Abutilon periplocifolium* Don.] Fields and hillsides, St. Croix.

MALVASTRUM COROMANDELIANUM (L.) Garcke. [*Malva coromandeliana* L.; *M. americana* L.; *M. tricuspidata* Ait.; *Malvastrum tricuspidatum* A. Gray.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

MALVASTRUM SPICATUM (L.) A. Gray. [*Malva spicata* L.] Hillsides, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

SIDA CILIARIS L. Dry, grassy and rocky situations, St. Thomas; St. Jan; St. Croix.

SIDA ERECTA Macf. Dry soil, St. Croix.

SIDA SPINOSA L. [*S. angustifolia* Lam.; (?) *S. spinosa polycarpa* Eggers; *S. retusa* of Millspaugh.] Banks, fields and cultivated grounds, St. Thomas; St. Jan; St. Croix.

SIDA GLOMERATA Cav. Banks and thickets, St. Thomas; St. Jan.

SIDA CARPINIFOLIA L. f. [*S. carpinifolia acuta* Millsp.; *S. carpinifolia antillana* Millsp.; (?) *S. carpinifolia brevicuspidata* Eggers.] Banks, fields, woods and thickets, St. Thomas; St. Jan; St. Croix.

SIDA RHOMBIFOLIA L. [*S. rhombifolia retusa* of Eggers.] Banks, fields, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

SIDA PROCUMBENS Sw. [*S. pilosa* Cav.; *S. supina* Sw.] Road-sides, St. Croix.

SIDA CORDIFOLIA L. [*S. althaeifolia* Sw.; *S. cordifolia althaeifolia*

of Millspaugh.] Banks, fields and thickets, St. Thomas; St. Jan; St. Croix.

SIDA HUMILIS Cav. [*Sida supina* of Millspaugh, St. Thomas; *Sida supina glabra* of Millspaugh and of Eggers.] Banks, fields, and thickets, St. Thomas; St. Jan; St. Croix.

SIDA GLABRA Mill. [*S. ulmifolia* Cav.; *S. arguta* Sw.] Banks, fields and thickets, St. Thomas; St. Croix.

SIDA GLUTINOSA Commers. [*S. nervosa* DC.; (?) *S. nervosa viscosa* Eggers.] Hillsides and thickets, St. Thomas; St. Jan; St. Croix.

SIDA ACUMINATA DC. [*S. acuminata macrophylla* Schl. and *microphylla* Schl.] Hillsides, St. Thomas; St. Croix.

SIDA EGGERSII E. G. Baker. St. Thomas, apparently (Eggers, Suppl. 14). Otherwise known only from Tortola and Culebra. Endemic.

SIDA JAMAICENSIS L. [*S. tristis* Schl.] Fields and hillsides, St. Thomas; St. Jan; St. Croix.

BASTARDIA VISCOSA (L.) H.B.K. [*Sida viscosa* L.] Dry fields, hills and thickets, St. Thomas; St. Jan; St. Croix.

MALACHRA CAPITATA L. [*M. palmata* Moench.] Dry soil, St. Croix.

MALACHRA ALCEIFOLIA Jacq. [*M. rotundifolia* Schrank.] Thickets, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

MALCHRA FASCIATA Jacq. [*M. radiata* Griseb., not L.; (?) *M. urens* of Eggers.] Waste grounds, St. Thomas.

URENA LOBATA L. [*U. americana* L. f.; *U. reticulata* Cav.; *U. lobata americana* Guerke.] Fields, woods, hillsides and cultivated grounds, St. Thomas; St. Jan; St. Croix.

URENA SINUATA L. St. Thomas (according to Guerke).

PAVONIA SPINIFEX (L.) Cav. [*Hibiscus spinifex* L.] Thickets, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

MALACHE SCABRA B. Vogel. [*Pavonia spicata* Cav.; *Althaea racemosa* Sw.; *P. racemosa* Sw.] Mangrove swamps, St. Croix (according to Eggers).

PARITI TILIACEUM (L.) A. Juss. [*Hibiscus tiliaceus* L.] Coastal woods, St. Thomas; St. Jan; St. Croix (according to West).

HIBISCUS BRASILIENSIS L. [*H. phoeniceus* Jacq.] Hillsides and thickets, St. Thomas; St. Croix.

HIBISCUS CLYPEATUS L. St. Croix (according to West).

HIBISCUS VITIFOLIUS L. Thickets and waste grounds, St. Thomas; St. Croix.

HIBISCUS SABDARIFFA L. Spontaneous after cultivation, St. Thomas; St. Croix.

HIBISCUS ROSA-SINENSIS L. Spontaneous after cultivation, St. Thomas. Planted for ornament.



HIBISCUS MUTABILIS L. Planted for ornament.

CIENFUEGOSIA HETEROPHYLLA (Vent) Garcke. [*Fugosia heterophylla*; *Kosteletzkya pentasperma* of Eggers.] Moist soil, St. Thomas.

ABELMOSCHUS ESCULENTUS (L.) Moench. [*Hibiscus esculentus* L.] Spontaneous after cultivation, St. Thomas; St. Jan; St. Croix.

THESPESIA POPULNEA (L.) Soland. [*Hibiscus populneus* L.] Coastal woods and thickets, St. Thomas; St. Jan; St. Croix. Commonly planted.

GOSYPIUM BARBADENSE L. Thickets and hillsides, spontaneous after cultivation, St. Thomas; St. Croix.

GOSYPIUM VITIFOLIUM Lam. is recorded by Schlechtendal as naturalized in St. Thomas; Eggers suggests it may formerly have been cultivated there.

ALTHAEA ROSEA Cav. Planted for ornament.

### BOMBACACEAE

CEIBA PENTANDRA (L.) Gaertn. [*Bombax pentandrum* L.; *B. heptaphyllum* of West; *Eriodendron anfractuosum* DC.] Hills, forests and roadsides, St. Thomas; St. Jan; St. Croix.

ADANSONIA DIGITATA L. Naturalized in wooded valleys, St. Croix (according to Eggers). Planted for shade on St. Thomas and St. Croix.

QUARARIBAEA TURBINATA (Sw.) Poir. [*Myrodia turbinata* Sw.] Woods, St. Jan; Spring Garden, St. Croix (according to West).

PACHIRA ALBA Walp. Planted, St. Thomas.

PACHIRA AQUATICA Aubl. [*Carolinca princeps* L. f.] Planted, St. Croix.

### STERCULIACEAE

MELOCHIA NODIFLORA Sw. [*Riedleia nodiflora* DC.] Hillsides, banks and thickets, St. Thomas; St. Jan; St. Croix.

**Moluchia pyramidata** (L.) Britton. [*Melochia pyramidata* L.] Grassy places, waste and cultivated grounds, St. Thomas (according to West); St. Croix.

**Moluchia tomentosa** (L.) Britton. [*Melochia tomentosa* L.] Hillsides and thickets, St. Thomas; St. Jan; St. Croix.

WALTHERIA AMERICANA L. [*W. indica* L.] Fields, banks and hillsides, St. Thomas; St. Jan; St. Croix.

AYENIA PUSILLA L. Thickets and hillsides, St. Thomas; St. Jan; St. Croix.

THEOBROMA CACAO L. Naturalized in shaded valleys, St. Croix (according to Eggers). Planted for its seeds.

GUAZUMA GUAZUMA (L.) Cockerell. [*Theobroma Guazuma* L.;

*Guazuma ulmifolia* Lam.; *G. tomentosa* H.B.K.] Fields, woods and roadsides, St. Thomas; St. Croix.

HELICTERES JAMAICENSIS Jacq. Thickets, St. Thomas; St. Jan; St. Croix.

#### DILLENACEAE

DAVILLA RUGOSA Poir. is recorded by Grisebach from the island St. Thomas, and also from St. Thomas-in-the-Vale, Jamaica. It occurs in the Jamaica parish, but is not known on our island.

#### OCHNACEAE

OURATEA LITTORALIS Urban. [*Gomphia nitida* of Eggers.] Coastal thickets, St. Thomas. Known otherwise only from Porto Rico.

#### TERNSTROEMIACEAE

**Taonabo peduncularis** (DC.) Britton. [*Ternstroemia peduncularis* DC.; *T. elliptica* of West and of Eggers.] Forests, Bordeaux Hill, St. Jan; Maroon Hill, St. Croix.

#### CLUSIACEAE

MAMMEA AMERICANA L. Forests, hills and roadsides, St. Thomas; St. Jan; St. Croix. Much planted.

CALOPHYLLUM CALABA Jacq. Forests, roadsides and valleys, St. Thomas; St. Croix.

CLUSIA ROSEA Jacq. [? *C. alba* of West.] Hillsides and forests, St. Thomas; St. Jan; St. Croix (according to West and to Eggers).

#### TAMARICACEAE

TAMARIX INDICA Willd. Planted for ornament.

#### BIXACEAE

BIXA ORELLANA L. Spontaneous after planting, St. Thomas; St. Croix. Grown for the dye stuff annato.

#### CANELLACEAE

CANELLA WINTERANA (L.) Gaertn. [*Laurus Winterana* L.; *Canella alba* Murr.] Woods and thickets, St. Thomas; St. Jan; St. Croix (according to Eggers).

#### VIOLACEAE

• **Calceolaria linearifolia** (Vahl) Britton. [*Viola linearifolia* Vahl; *Hybanthus linearifolius* Urban; *Ionidium strictum* Vent.] Rocky thickets, Water Island, St. Thomas; St. Croix.

## FLACOURTIACEAE

PROCKIA CRUCIS L. [*Trilix crucis* Griseb.] Forests, St. Thomas; St. Jan (according to Eggers); St. Croix.

MYROXYLON BUXIFOLIUM (A. Gray) Krug & Urban. [*Xylosma buxifolium* A. Gray; *Drypetes laevigata* of Eggers.] Cinnamon Gut, St. Jan; St. Croix (according to Urban).

MYROXYLON NITIDUM (Hell.) Kuntze [*Xylosma nitidum* A. Gray], is recorded by Eggers as naturalized on St. Thomas. It is endemic in Jamaica.

SAMYDA SPINULOSA Vent. [*S. glabrata* Grisebach and of Eggers, not Sw.] Thickets, Crown, St. Thomas (according to Eggers). Otherwise known only from Porto Rico.

SAMYDA DODECANDRA Jacq. [*S. serrulata* L.] Thickets, St. Thomas; St. Jan; St. Croix.

CASEARIA GUIANENSIS (Aubl.) Urban. [*Iroucana guianensis* Aubl.; *Casearia ramiflora* Vahl; *C. hirta* of Millspaugh; *C. nitida* of Kuntze.] Woods and thickets, St. Thomas; St. Croix; St. Jan.

CASEARIA DECANDRA Jacq. [*C. parvifolia* Willd.; *Samyda decandra* Jacq.; *C. parvifolia microcarpa* Eggers.] Woods and thickets, St. Thomas; St. Jan; St. Croix (according to Eggers).

CASEARIA ARBOREA (L. C. Rich) Urban. [*Samyda arborea* L. C. Rich; *C. stipularis* Vent.] St. Thomas, collected by O. Kuntze, whose specimen is so labelled by him; Urban (Symb. Ant. 7: 75) indicates, however, that it may have come from Porto Rico.

CASEARIA SYLVESTRIS Sw. [*Samyda parviflora* L. not Loeff.] Woods, hills and thickets, St. Thomas; St. Jan; St. Croix.

## TURNERACEAE

TURNERA DIFFUSA Willd. [*T. microphylla* Desv.; *T. parviflora* of Eggers.] Coastal thickets, St. Thomas; St. Jan; St. Croix.

TURNERA ULMIFOLIA L. [*T. ulmifolia acuta* Urban; *T. angustifolia* Mill.] Hillsides and waste grounds, St. Thomas; St. Jan; St. Croix.

PIRIQUETA VISCOSA Griseb. Hillside thickets, St. Thomas.

## PASSIFLORACEAE

PASSIFLORA PALLIDA L. [*P. suberosa* L.; *P. hirsuta* L.; *P. minima* L.; *P. parviflora* Sw.; *P. peltata* Cav.] Hillsides, banks and thickets, St. Thomas; St. Jan; St. Croix.

PASSIFLORA FOETIDA L. Banks, waste and cultivated grounds, St. Thomas; St. Croix.

PASSIFLORA MULTIFLORA L. Thickets, St. Thomas (according to Masters); St. Jan.

PASSIFLORA RUBRA L. Woods and thickets, St. Thomas; St. Jan; St. Croix (according to Eggers).

PASSIFLORA LAURIFOLIA L. Forests and thickets, St. Thomas; St. Jan; St. Croix. Perhaps not indigenous; much planted.

PASSIFLORA INCARNATA L., recorded from St. Croix by West, must be an error in determination.

PASSIFLORA QUADRANGULARIS L. Planted for its fruit.

PASSIFLORA MALIFORMIS L. Planted for its fruit.

### CARICACEAE

CARICA PAPAYA L. Spontaneous after cultivation, St. Thomas; St. Croix. Much planted.

### BEGONIACEAE

Several kinds of Begonias are grown as garden flowers.

BEGONIA HUMILIS Ait., attributed to St. Thomas by A. de Candolle as collected by Finlay, was really from Trinidad.

### CACTACEAE

HYLOCEREUS TRIGONUS (Haw.) Safford. [*Cereus trigonus* Haw., *C. triangularis* of West and of Eggers.] On trees and rocks in forests and valleys, St. Thomas; St. Jan.

HYLOCEREUS UNDATUS (Haw.) Britton & Rose. [*Cereus undatus* Haw.; *Cereus triangularis* of authors.] Persistent after cultivation, St. Thomas; St. Croix.

SELENICEREUS GRANDIFLORUS (L.) Britton & Rose. [*Cereus grandiflorus* L.] Persistent after cultivation, St. Thomas; St. Croix.

SELENICEREUS PTERANTHUS (Link & Otto) Britton & Rose. [*Cereus nycticalis* Link.] Recorded by Millspaugh as naturalized on stone walls of a neglected garden at Bassin, St. Croix.

CEPHALOCEREUS ROYENI (L.) Britton & Rose. [*Cactus Royeni* L.; *C. peruvianus* of West; *Cereus floccosus* Otto; *Pilocereus Fouchianus* Weber; *Cereus armatus* Otto.] Dry rocky hillsides, St. Thomas; St. Jan; St. Croix.

CEPHALOCEREUS NOBILIS (Haw.) Britton & Rose. [*Cereus nobilis* Haw.; *Cereus strictus* DC.] Persistent after cultivation, St. Thomas.

ACANTHOCEREUS PENTAGONUS (L.) Britton & Rose. [*Cactus pentagonus* L.] Persistent after planting, St. Thomas; St. Croix.

CACTUS INTORTUS Mill. [*C. Melocactus* of West; *Melocactus communis* of Eggers; *M. atrosanguineus* Link & Otto.] Coastal hills and cliffs, St. Thomas; St. Jan; St. Croix.

CORYPHANTHA NIVOSA (Link) Britton. [*Mamillaria nivosa* Link.]

Rocky slopes and cliffs, Buck Island and Flat Cays, St. Thomas; St. Jan and Little St. James Island, St. Jan.

OPUNTIA RUBESCENS Salm-Dyck. [*O. catacantha* Link & Otto; *O. spinosissima* and *tuberculata* of Eggers.] Coastal hills, St. Thomas; St. Jan; St. Croix. The spineless or nearly spineless race is commonly planted for interest, and occurs wild on Little St. James Island, St. Jan, and on Culebra.

OPUNTIA REPENS Bello. [*Cactus curassavicus* of West; *O. curassavica* of Eggers and of Millspaugh.] Dry fields and hillsides, St. Thomas; St. Jan; St. Croix.

**Opuntia antillana** Britton & Rose, spec. nov.

Plant depressed, ascending or nearly prostrate, often forming clumps 1 m. broad, seldom more than 4 dm. high. Joints obovate or oblong-obovate, 2 dm. long or less, green, glabrous, readily detached; leaves conic-subulate, 2-3 mm. long; areoles large, 2-3 cm. apart, brown-woolly; spines mostly 3-6 at each areole, subulate, rather stout, terete, 1-6 cm. long, yellow fading gray or nearly white; glochids many, yellow; flowers about 7 cm. broad; petals obtuse, bright yellow or fading reddish; fruit red-purple, about 4 cm. long.

Rocky and sandy soil, St. Thomas, St. Croix, also on Tortola, Porto Rico, Hispaniola, and St. Kitts. Type specimen collected on St. Kitts (*Rose, Fitch & Russell 3230*).

OPUNTIA DILLENII (Ker.) Haw. [*Cactus Dillenii* Ker.; *Cactus Opuntia* of West; *O. Tuna* of Eggers and of Millspaugh; *O. horrida* Salm-Dyck.] Banks, fields and hills, St. Thomas; St. Jan; St. Croix. A hybrid with *O. rubescens* was observed on Buck Island, St. Thomas.

OPUNTIA TRIACANTHA (Willd.) DC. [*Cactus triacanthus* Willd.] Coastal rocks, Buck Island, St. Thomas.

NOPALEA COCHENILLIFERA (L.) Salm-Dyck. [*Cactus cochenillifer* L.; *Opuntia coccinellifera* Mill.] Persistent or spontaneous after cultivation; recorded by Eggers as occurring on limestone, St. Thomas; St. Croix.

PERESKIA PERESKIA (L.) Karst. [*Cactus Pereskia* L.; *P. aculeata* Mill.] Spontaneous after cultivation, St. Thomas; St. Croix.

PERESKIA GRANDIFOLIA Haw. [*P. Bleo* of Eggers and of Millspaugh.] Spontaneous after cultivation, St. Thomas; St. Croix.

CEREUS NORTHUMBERLANDIA Lambert. [*C. lepidotus* Salm-Dyck.] Planted, St. Croix.

CEREUS HEXAGONUS (L.) Mill. [*C. peruvianus* (L.) Mill.] Planted (according to Eggers).

Other species of Cacti are occasionally cultivated for interest.

## THYMELAEACEAE

DAPHNOPSIS CARIBAEA Griseb. [*Nectandra antillana* of Millspaugh.] Forests and hillsides, St. Thomas; St. Jan; St. Croix.

## LYTHRACEAE

AMMANNIA COCCINEA Rottb. Moist ground, St. Thomas; St. Jan; St. Croix.

AMMANNIA LATIFOLIA L. [*A. sanguinolenta* Sw.] Moist ground, St. Thomas; St. Croix.

GINORIA ROHRII (Vahl) Koehne. [*Antherylium Rohrii* Vahl.] Coastal thickets, St. Thomas; St. Jan; St. Croix.

LAWSONIA INERMIS L. Spontaneous after cultivation, St. Thomas; St. Croix.

LAGERSTROEMIA INDICA L. Commonly planted for ornament.

## PUNICACEAE

PUNICA GRANATUM L. [*P. nana* L.] Spontaneous after planting, St. Thomas; St. Jan; St. Croix. Grown for its fruit.

## RHIZOPHORACEAE

RHIZOPHORA MANGLE L. Mangrove swamps, St. Thomas; St. Jan; St. Croix. Not very common.

## COMBRETACEAE

TERMINALIA CATAPPA L. [*Buceras Catappa* Hitchc.] Hillsides, valleys, and commonly planted, St. Thomas; St. Jan; St. Croix.

CONOCARPUS ERECTA L. [*C. erecta procumbens* Jacq.] Coastal rocks and mangrove swamps, St. Thomas; St. Jan; St. Croix.

BUCIDA BUCERAS L. [*Buceras Buceras* Millsp.; *Myrobalanus Buceras* Kuntze.] Moist soil, mostly near the coasts, but occasional on hillsides, St. Thomas; St. Jan; St. Croix.

LAGUNCULARIA RACEMOSA (L.) Gaertn. [*Conocarpus racemosa* L.] Coastal swamps, St. Thomas; St. Jan; St. Croix.

QUISQUALIS INDICA L. is commonly cultivated as an ornamental vine.

## MYRTACEAE

PSIDIUM GUAJAVA L. Thickets, hillsides, and commonly planted for its fruit, St. Thomas; St. Jan; St. Croix.

PSIDIUM AMPLEXICAULE Pers. [*P. cordatum* Sims.] Hillsides, St. Thomas; St. Jan; planted on St. Croix. Occurs also on Tortola. Apparently endemic in the Virgin Islands, although recorded from Nevis.

PSIDIUM AROMATICUM Knox, recorded from St. Thomas, is not identified.

AMOMIS CARYOPHYLLATA (Jacq.) Krug & Urban. [*Myrtus caryophyllata* Jacq.; *Myrtus acris* Sw.; *M. Pimenta* Ortega; ? *Pimenta vulgaris* of Eggers; *Pimenta acris* Kostel.; *A. caryophyllata grisea* Krug & Urban.] Hills and woods, St. Jan; St. Croix (according to Eggers).

MYRCIA PANICULATA (Jacq.) Krug & Urban. [*Eugenia paniculata* Jacq.; *E. acetosans* Poir.; *E. marginata* Pers.; *Myrtus coriacea* Vahl; *Myrcia coriacea* DC.; *M. coriacea Imrayana* Griseb.] Forests, St. Thomas; St. Jan; St. Croix.

MYRCIA SPLENDENS (Sw.) DC., doubtfully accredited to St. Thomas by Urban, as collected by Riedlé, probably was from Porto Rico, where it is abundant.

CALYPTRANTHES THOMASIANA Berg. Signal Hill, St. Thomas; Bordeaux, St. Jan. Endemic.

CALYPTRANTHES PALLENS (Poir.) Griseb. [*C. Chytraculia ovalis* Berg.; *C. Chytraculia zuzygium* Berg.; *Chytraculia pallens* Millsp.; *C. Chytraculia* of West.] Forests, rare, St. Thomas; St. Croix.

EUGENIA LIGUSTRINA (Sw.) Willd. [*Myrtus ligustrina* Sw.; *M. cerasina* Vahl.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

EUGENIA LANCEA Poir. [*E. ludibunda* Bert.; *E. virgultosa* of Eggers and of Millspaugh; *E. glabrata* of Eggers; *Myrcia thomasiana* DC.] Woods and thickets, St. Thomas; St. Croix.

EUGENIA MONTICOLA (Sw.) DC. [*Myrtus monticola* Sw.; *Eugenia Poiretii* Berg, not DC.; *E. foetida* West; *E. flavovirens* Berg.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

EUGENIA BUXIFOLIA (Sw.) Willd. [*Myrtus buxifolia* Sw.; *E. foetida* Poir.] Thickets, St. Thomas; St. Croix.

EUGENIA AXILLARIS (Sw.) Willd. [*Myrtus axillaris* Sw.] Thickets, St. Croix.

EUGENIA RHOMBEA (Berg) Krug & Urban. [*E. foetida rhombea* Berg.; *E. Poiretii* of Millspaugh; ? *E. pallens* of Eggers.] Coastal thickets, St. Thomas (according to Berg); St. Croix.

EUGENIA PROCERA (Sw.) Poir. [*Myrtus procera* Sw.; *M. cerasina* Vahl of Eggers.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

EUGENIA PSEUDOPSIDIUM Jacq. [*E. portoricensis* DC.; *E. thomasiana* Berg.] Forests and wooded valleys, St. Thomas; St. Jan; St. Croix.

EUGENIA CORDATA (Sw.) DC. [*Myrtus cordata* Sw.; *M. ramiflorus* Vahl; *E. sessiliflora* DC., not Vahl; *E. lateriflora* of Eggers.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

EUGENIA SESSILIFLORA Vahl. Hillsides, St. Thomas (according to Eggers); St. Croix. Endemic.

EUGENIA FLORIBUNDA West. Woods, hillsides and thickets, St. Thomas; St. Jan; St. Croix.

EUGENIA UNIFLORA L. Spontaneous after planting, St. Thomas; St. Croix. Grown for its fruit.

EUGENIA MICRANTHA Vahl, not DC., recorded from St. Croix by West, is not further determined (hyponym).

EUGENIA EMARGINATA Vahl, not DC., recorded from St. Croix by Vahl, is not further determined (hyponym).

EUGENIA PEDUNCULATA Raeusch. of St. Croix, is unknown to modern botanists.

ANAMOMIS FRAGRANS (Sw.) Griseb. [*Myrtus fragrans* Sw.; *Eugenia punctata* Vahl; *Anamomis punctata* Griseb.] St. Croix; forests, St. Jan (according to Eggers).

JAMBOS JAMBOS (L.) Millsp. [*Eugenia Jambos* L.; *Jambos vulgaris* DC.] Woods and valleys, naturalized, St. Thomas; St. Jan; St. Croix.

JAMBOS MALACCENSIS (L.) DC. [*Eugenia malaccensis* L.], planted for its fruit, was naturalized in shaded valleys, St. Croix (according to Eggers).

MYRTUS COMMUNIS L. Planted for ornament.

#### LECYTHIDACEAE

COUROUPITA GUIANENSIS Aubl. Planted for ornament and interest.

#### MELASTOMACEAE

TETRAZYGLIA ANGUSTIFOLIA (Sw.) DC. [*Melastoma angustifolia* Sw.; *Miconia angustifolia* Griseb.] Hillside thickets, St. Thomas; St. Jan; St. Croix (according to Cogniaux).

TETRAZYGLIA ELAEAGNOIDES (Sw.) DC. [*Melastoma elaeagnoides* Sw.] Forests and hillside thickets, St. Thomas; St. Jan; St. Croix.

MICONIA MACROPHYLLA (D. Don) Triana. [*Chitonium macrophylla* D. Don; *Diplochita serrulata* DC.] Wooded valleys, St. Thomas; St. Croix (according to Eggers and to Cogniaux).

MICONIA IMPETIOLARIS (Sw.) D. Don. [*Melastoma impetiolaris* Sw.] Forests, St. Croix (West); St. Thomas (according to Grisebach).

MICONIA LAEVIKATA (L.) DC. [*Melastoma laevigata* L.; *M. prasina* of Millspaugh, St. Thomas.] Woods and hillsides, St. Thomas; St. Jan; St. Croix.

MICONIA PRASINA (Sw.) DC., recorded by Naudin as collected on



St. Thomas by Riedlé, was probably from Porto Rico. It occurs on Tortola.

MICONIA STENOSTACHYA (Schr.) DC. [*Miconia argyrophylla* Benth., not DC.], recorded by Naudin and others as collected by Finlay on St. Thomas, was really from Trinidad.

MICONIA THOMASIANA DC. was not from St. Thomas, but from Porto Rico.

MICONIA ACINODENDRUM (L.) Triana. [*Melastoma acinodendrum* L.; *Tshudya berbiceana* Griseb.], recorded by Naudin and others as collected on St. Thomas by Finlay, was really from Trinidad; St. Croix (according to West).

MECRANIUM AMYGDALINUM (Desr.) C. Wright [*Cremanium amygdalinum* Griseb.], attributed to St. Thomas by Naudin, was from Hispaniola, collected by Poiteau.

CLIDEMIA SPICATA DC., is recorded by Cogniaux as collected on St. Thomas by Finlay, but the specimen was from Trinidad. Eggers erroneously records it from all three islands.

CLIDEMIA HIRTA (L.) D. Don, attributed to St. Thomas by Naudin as collected by Riedlé, was probably from Porto Rico.

CLIDEMIA RUBRA Mart, accredited to St. Thomas by Naudin and others as collected by Finlay, was really from Trinidad.

MOURIRIA DOMINGENSIS (Tuss.) Spach. [*Petaloma domingensis* Tuss.; *P. Mouriri* of West.] Borders of a stream, Spring Garden, St. Croix.

NEPSERA AQUATICA (Aubl.) Naud., recorded by Cogniaux as collected by Riedlé on St. Thomas, was probably from Porto Rico.

#### ONAGRACEAE

JUSSIAEA SUFFRUTICOSA L. [*J. angustifolia* Lam.; *J. octovalvis* Sw.; *J. suffruticosa ligustrifolia* of Eggers.] Wet grounds, St. Thomas; St. Jan; St. Croix.

JUSSIAEA ERECTA L. St. Croix (according to West).

#### ARALIACEAE

DENDROPANAX ARBOREA (L.) Dcne. & Pl. [*Sciadophyllum capitatum* of Eggers; *Aralia arborea* L.; *Gilibertia arborea* E. March.] Forests, hills of St. Thomas.

DIDYMOPANAX MICANS (Willd.) Krug & Urban. [*Aralia micans* Willd.; *Panax speciosum* of Eggers.] Forest, King's Hill and Bordeaux, St. Jan.

#### APIACEAE

ERYNGIUM FOETIDUM L. Moist grounds, Caret Bay, St. Thomas (according to Eggers).

CELERI GRAVEOLENS (L.) Britton. [*Apium graveolens* L.; *Peucedanum graveolens* Benth.] Persistent after cultivation, St. Croix. Grown for celery.

ANETHUM GRAVEOLENS L. Spontaneous after cultivation, St. Thomas; St. Croix.

PIMPINELLA ANISUM L. Spontaneous after cultivation, St. Croix. Grown for anise.

APIUM PETROSELINUM L. [*Petroselinum sativum* Hoffm.] Cultivated for food.

DAUCUS CAROTA L. Cultivated for food.

FOENICULUM FOENICULUM (L.) Karst. [*F. vulgare* Gaertn.] Cultivated for drug purposes.

CEREFOLIUM CEREFOLIUM (L.) Britton. [*Anthriscus Cerefolium* L.] Cultivated for flavoring.

#### ERICACEAE

XOLISMA RUBIGINOSA (Pers.) Small. [*Andromeda rubiginosa* Pers.; *Lyonia jamaicensis* of Eggers.] Bolongo, St. Thomas. Known otherwise only from Hispaniola.

#### THEOPHRASTACEAE

JACQUINIA BERTERII Spreng. [*J. Berterii retusa* Urban.] Thickets, St. Thomas; St. Jan; St. Croix (according to Mez).

JACQUINIA BARBASCO (Loefl.) Mez. [*Chrysophyllum Barbasco* Loefl.; *J. armillaris* Jacq.; *J. armillaris arborea* of Eggers.] Coastal thickets, St. Thomas; St. Jan; St. Croix.

#### MYRSINACEAE

ICACOREA GUADALUPENSIS (Duch.) Britton. [*Ardisia guadalupensis* Duch.; *A. coriacea* of West and of Eggers.] Forests and hills, St. Thomas; St. Jan; St. Croix.

STYLOGYNE LATERIFLORA (Sw.) Mez. [*Ardisia lateriflora* Sw.; *A. caribaea* Miquel.] St. Thomas (according to Eggers).

#### PLUMBAGINACEAE

PLUMBAGO SCANDENS L. [*P. scandens densiflora* Kuntze.] Banks, woods and thickets, St. Thomas; St. Jan; St. Croix.

PLUMBAGO CAPENSIS Thunb. Grown in gardens.

PLUMBAGO ZEYLANICA L. St. Croix (according to West).

#### SAPOTACEAE

SAPOTA ACHRAS Mill. [*Achras Sapota* L.] Forests, and commonly planted, St. Thomas; St. Jan; St. Croix.

LUCUMA MULTIFLORA A. DC. [*Achras multiflora* Vahl, according to Eggers.] Forests, St. Thomas; St. Croix.

SIDEROXYLON FOETIDISSIMUM Jacq. [*S. mastichodendron* Jacq.] Forests, St. Thomas; St. Jan; St. Croix.

DIPHOLIS SALICIFOLIA (L.) A. DC. [*Achras salicifolia* L.; *Bumelia salicifolia* Sw.] Forests and hillsides, St. Thomas; St. Jan; St. Croix.

BUMELIA OBOVATA (Lam.) A. DC. [*Sideroxylon obovatum* Lam.; *B. cuneata* Sw.] Coastal hillsides, shores and borders of marshes, St. Thomas; St. Jan; St. Croix.

CHRYSOPHYLLUM CAINITO L. St. Thomas; St. Croix, occasionally planted, perhaps spontaneous.

CHRYSOPHYLLUM EGGERSII Pierre. [*C. microphyllum* of Eggers; ? *C. oliviforme monopyrenum* of Eggers.] Woods and hillsides, St. Thomas; St. Jan; St. Croix. Endemic.

CHRYSOPHYLLUM PAUCIFLORUM Lam. [*C. glabrum* of Eggers and of Millspaugh; *C. pauciflorum nervosum* Pierre.] Forests and hillsides, St. Thomas; St. Jan; St. Croix. Otherwise known only from Porto Rico.

CHRYSOPHYLLUM BICOLOR Pierre. St. Thomas (according to Pierre and Urban); known otherwise only from Porto Rico.

MIMUSOPS NITIDA (Sessé & Moç.) Urban. [*Sapota Sideroxylon* of Eggers.] Forests, St. Jan. Determined from foliage only; its flowers and fruit have not been collected by botanists, and the identification is, therefore, uncertain.

MIMUSOPS ELENGI L. Planted, St. Thomas.

## SYMPLOCACEAE

SYMPLOCOS MARTINICENSIS Jacq. Forest, Signal Hill, St. Thomas.

## OLEACEAE

FORESTIERA SEGREGATA (Jacq.) Krug & Urban. [*Myrica segregata* Jacq.; *Forestiera porulosa* Poir; *F. porulosa Jacquinii* Eggers.] Thickets, St. Croix.

FORESTIERA EGGERSIANA Krug & Urban. Thickets, St. Thomas; St. Jan. Known otherwise only on Culebra, Vieques and Virgin Gorda, thus endemic in the Virgin Islands.

FORESTIERA RHAMNIFOLIA Griseb. [*Drypetes laevigata* of Millspaugh.] Bluffs of Salt River, St. Croix.

MAYEPAEA CARIBAEA (Jacq.) Kuntze. [*Chionanthus caribaea* Jacq.; *C. compacta* Sw.; *Linociera compacta* R. Br.] Forests, St. Thomas; St. Croix.

JASMINUM SAMBAC (L.) Soland. [*Nyctanthes Sambac* L.; *J. quinqueflorum* Heyne.] Spontaneous after planting, St. Croix.

JASMINUM PUBESCENS (Retz) Willd. [*Nyctanthes pubescens* Retz.] Spontaneous after planting, St. Thomas; St. Croix.

JASMINUM GRANDIFLORUM L. [*J. officinale* of Millspaugh.] Spontaneous after planting, St. Thomas; St. Croix.

JASMINUM OFFICINALE L. Planted for ornament.

JASMINUM HUMILE L. [*J. revolutum* Sims.] Planted for ornament.

OLEA EUROPAEA L. Planted on St. Thomas.

#### LOGANIACEAE

SPIGELIA ANTHELMIA L. Moist or exsiccated situations, St. Thomas; St. Croix.

#### APOCYNACEAE

ALLAMANDA CATHARTICA L. Spontaneous after cultivation, St. Thomas.

PLUMIERA ALBA L. Coastal rocks and hills, St. Thomas; St. Jan; St. Croix.

PLUMIERA RUBRA L. [*P. obtusifolia* of Millspaugh.] Planted for ornament.

PLUMIERA OBTUSA L. St. Croix (according to West); naturalized in gardens (according to Eggers).

CATHARANTHUS ROSEUS (L.) D. Don. [*Vinca rosea* L.; *Lochnera rosea* Rchb.] Waste grounds, spontaneous after cultivation, and much planted for ornament, St. Thomas; St. Jan; St. Croix.

TABERNAEMONTANA CAPENSIS L. Planted for ornament.

A species of *Tabernaemontana* was found in thickets at Frenchman's Bay, St. Thomas, according to Eggers, who, doubtfully, records it as *T. citrifolia*.

RAUWOLFIA TETRAPHYLLA L. [*R. nitida* Jacq.] Woods, hillsides and thickets, St. Thomas; St. Jan; St. Croix.

RAUWOLFIA LAMARCKII A. DC. Hillsides and thickets, St. Thomas; St. Jan; St. Croix.

CERBERA THEVETIA L. [*Thevetia Thevetia* Millsp.; *T. neriifolia* Juss.] Hillsides and thickets, St. Thomas; St. Jan; St. Croix.

ECHITES AGGLUTINATA Jacq. [*E. circinalis* Sw.] Forests and thickets, St. Thomas; St. Jan; St. Croix at Cane Bay (according to Eggers).

URECHITES LUTEA (L.) Britton. [*Vinca lutea* L.; *Echites suberecta* Jacq.; *E. barbata* Desv.; *E. neriandra* Griseb.] Thickets, St. Thomas; St. Jan; St. Croix (according to Eggers).

NERIUM OLEANDER L. Persistent after cultivation; planted for ornament; St. Thomas; St. Jan; St. Croix.

## ASCLEPIADACEAE

ASCLEPIAS CURASSAVICA L. [*A. nivea curassavica* Kuntze.]  
Fields, hillsides and banks, St. Thomas; St. Jan; St. Croix.

ASCLEPIAS NIVEA L. Collected on St. Thomas by Krebs.

ASCLEPIAS FRUTICOSA L. Cultivated on St. Croix (according to West).

CALOTROPIS PROCERA (Ait.) Ait. f. [*Asclepias procera* Ait.] Fields and hillsides, St. Thomas; St. Jan; St. Croix. Naturalized.

METASTELMA PARVIFLORUM R. Br. [*M. Schlechtendalii* of Eggers and of Millspaugh.] Thickets, St. Thomas; St. Croix.

METASTELMA ALBIFLORUM Griseb. St. Thomas (according to Schlechter).

METASTELMA DECIPIENS Schlechter. St. Thomas (according to Schlechter).

METASTELMA GRISEBACHIANUM Schlechter. St. Thomas. Otherwise known only from Porto Rico.

METASTELMA DECAISNEANUM Schlechter. Hillsides, St. Thomas; St. Jan; St. Croix.

The above-listed species of *Metastelma* much resemble each other. It is possible that Schlechter has recognized too many species in the area.

OXYPETALUM CORDIFOLIUM (Vent) Schlechter. [*Gothofreda cordifolia* Vent.; *O. riparium* H.B.K.] St. Thomas (according to Schlechter).

PHILIBERTELLA CLAUSA (Jacq.) Vail. [*Asclepias viminalis* Sw.; *Sarcostemma Brocneii* Meyer], recorded as from St. Thomas by West and by Eggers, has not been observed there by recent collectors.

FISCHERIA CRISPIFLORA (Sw.) Schltr. [*Cynanchum crispiflorum* Sw.; *F. scandens* DC.] Forests, Spring-gut, St. Croix (according to Eggers). Known otherwise only from Cuba and Jamaica; the determination is doubtful.

IBATIA MARITIMA (Jacq.) Dcne. [*Asclepias maritima* Jacq.; *Ibatia muricata* Griseb.] Rocky hillsides and thickets, St. Thomas; St. Jan; St. Croix.

HOYA CARNOSA (L. f.) R. Br. Cultivated for ornament.

STEPHANOTIS FLORIBUNDA A. Brongn. Cultivated for ornament.

## CUSCUTACEAE

CUSCUTA AMERICANA L. On trees and shrubs, St. Thomas; St. Jan; St. Croix.

## CONVOLVULACEAE

EVOLVULUS NUMMULARIUS L. Dry, shaded situations, St. Thomas; St. Jan; St. Croix.

EVOLVULUS GLABER Spreng. [*E. mucronatus* Sw.] Moist, grassy situations, St. Thomas; St. Jan; St. Croix.

EVOLVULUS LINIFOLIUS L. St. Thomas and St. Croix (according to Schlechtendal); moist localities, all islands (according to Eggers). Not found by us, and not known on Porto Rico.

JACQUEMONTIA NODIFLORA (Desr.) G. Don. [*Convolvulus nodiflorus* Desr.; *C. albiflorus* West (hyponym).] Thickets, St. Thomas; St. Jan; St. Croix.

JACQUEMONTIA JAMAICENSIS (Jacq.) Hall. f. [*Convolvulus jamaicensis* Jacq.] Coastal thickets, St. Thomas; St. Croix.

JACQUEMONTIA PENTANTHA (Jacq.) G. Don. [*Convolvulus pentanthus* Jacq.; *C. violaceus* Vahl; *J. violacea* Choisy.] Thickets, St. Thomas; St. Jan; St. Croix.

CONVOLVULUS MATUTINUS West and *C. VENENATUS* West, described from St. Croix, are not further identified.

THYELLA TAMNIFOLIA (L.) Raf. [*Ipomoea tamnifolia* L.; *Jacquemontia tamnifolia* Griseb.] Banks, hills and thickets, St. Thomas; St. Jan (according to Eggers); St. Croix.

**Exogonium solanifolium** (L.) Britton. [*Ipomoea solanifolia* L.; *I. filiformis* Jacq.; *Convolvulus filiformis* Desr.; *Exogonium filiforme* Choisy; *Ipomoea eustachiana* of Millspaugh.] Coastal thickets, St. Thomas; St. Croix.

EXOAGONIUM REPANDUM (Jacq.) Choisy. [*Ipomoea repanda* Jacq.] Woods and forests, St. Thomas; St. Jan.

EXOAGONIUM ARENARIUM Choisy. [*Ipomoea arenaria* Steud.; *I. Stuedelii* Millsp.; *I. Eggersiana* Peter; *E. Eggersii* House.] Thickets, St. Thomas; St. Jan; St. Croix.

IPOMOEA DISSECTA (Jacq.) Pers. [*Convolvulus dissectus* Jacq.; *Merremia dissecta* Hall. f.; *Operculina dissecta* House; *Ipomoea sinuata* Ort.] Thickets, fences and woods, St. Thomas; St. Jan; St. Croix.

IPOMOEA AEGYPTIA L. [*Convolvulus pentaphyllus* L.; *Ipomoea pentaphylla* Jacq.; *Merremia aegyptia* Urban.] Fields, fences and thickets, St. Thomas; St. Jan; St. Croix.

IPOMOEA QUINQUEFOLIA L. [*Merremia quinquefolia* Hall. f.] Thickets, St. Thomas; St. Croix.

IPOMOEA POLYANTHES R. & S. [*Convolvulus umbellatus* L.; *Ipomoea umbellata* Meyer, not L.; *Merremia umbellata* Hall. f.; *Ipomoea mollicoma* Miq.; *Convolvulus sagittifer* H.B.K.] Fields, banks and thickets, St. Thomas; St. Jan; St. Croix.

IPOMOEA NIL (L.) Roth. [*Convolvulus Nil* L.; *Pharbitis Nil* Choisy; *I. hederacea barbata* of Kuntze; ? *Convolvulus hederaceus* of Schlechtendal.] Banks, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

IPOMOEA CATHARTICA Poir. [*Convolvulus acuminatus* Vahl; *Ipomoea acuminata* R. & S., not R. & P.; *Pharbitis cathartica* Choisy; *P. acuminata* Choisy.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

IPOMOEA ASARIFOLIA (Desr.) R. & S. [*Convolvulus asarifolius* Desr.] Danish Islands (according to Grisebach).

IPOMOEA PES-CAPRAE (L.) Roth. [*Convolvulus Pes-caprae* L.; *C. brasiliensis* L.; *C. maritimus* Lam.] Coastal sands, St. Thomas; St. Jan; St. Croix.

IPOMOEA STOLONIFERA (Cyr.) Poir. [*Convolvulus littoralis* L.; *C. arenarius* Vahl; *Ipomoea littoralis* Boiss.; *Convolvulus stoloniferus* Cyr.; *Ipomoea acetosaefolia* R. & S.] Coastal sands, St. Croix (according to West).

IPOMOEA HEPTAPHYLLA (Rottl. & Willd.) Voigt. [*Convolvulus heptaphyllus* Rottl. & Willd.; *Ipomoea pulchella* Griseb., not Roth.] St. Thomas (according to Urban).

IPOMOEA CARNEA Jacq. St. Croix (according to West).

IPOMOEA TRILOBA L. [*Convolvulus Sloanei* Spreng.; *I. parviflora* Vahl; *I. triloba eustachiana* of Eggers; *I. triloba quinqueloba* Kuntze.] Fields, banks and thickets, St. Thomas; St. Jan; St. Croix.

IPOMOEA TILIACEA (Willd.) Choisy. [*Convolvulus tiliaceus* Willd.; *C. fastigiatus* Roxb.; *I. fastigiata* Sweet; *I. Batatas fastigiata* Kuntze.] Thickets and hillsides, St. Thomas; St. Jan; St. Croix.

IPOMOEA BATATAS (L.) Lam. [*Convolvulus Batatas* L.; *Ipomoea pandurata cuspidata* Kuntze.] Persistent after cultivation, St. Thomas; St. Jan; St. Croix. Much planted for food.

IPOMOEA TRICOLOR Cav. [*I. violacea* Grisebach, and of Eggers and Millspaugh.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

IPOMOEA PURPUREA (L.) Lam. [*Convolvulus purpureus* L.] St. Croix (according to West). Planted for ornament.

IPOMOEA LEARII Paxton. Planted for ornament.

IPOMOEA PES-TIGRIDIS L. [*Convolvulus Pes-tigridis* L.] St. Thomas (according to Schlechtendal).

IPOMOEA HORSFALLIAE W. Hook. Planted for ornament.

IPOMOEA QUINQUEPARTITA (Vahl) R. & S. [*Convolvulus quinquepartitus* Vahl; *C. ovalifolius* West, not Vahl,] of St. Croix, is not further identified.

IPOMOEA LEUCANTHA Jacq., a South American species, is recorded by Eggers from St. Thomas and St. Croix.

OPERCULINA TRIQUETRA (Vahl) Hallier f. [*Convolvulus triqueter* Vahl; *Ipomoea triquetra* R. & S.] St. Thomas; St. Croix.

OPERCULINA TUBEROSA (L.) Meissn. [*Ipomoea tuberosa* L.] Forests, St. Thomas; St. Croix (according to Eggers).

CALONYCTION ACULEATUM (L.) House. [*Convolvulus aculeatus* L.; *Ipomoea Bona-nox* L.] Spontaneous after cultivation, St. Thomas. Planted for ornament.

CALONYCTION TUBA (Schlecht.) Colla. [*Convolvulus tuba* Schlecht.; *Ipomoea tuba* G. Don.] Coastal thickets, St. Thomas; St. Jan; St. Croix.

QUAMOCLIT QUAMOCLIT (L.) Britton. [*Ipomoea Quamoclit* L.; *Quamoclit vulgaris* Choisy.] Banks, thickets and cultivated grounds, St. Thomas; St. Croix.

QUAMOCLIT COCCINEA (L.) Moench. [*Ipomoea coccinea* L.; *I. hederacfolia* L.; *I. sanguinea* Vahl.] Banks, thickets and cultivated grounds, St. Thomas; St. Jan; St. Croix.

RIVEA TILIIFOLIA (Desr.) Choisy. [*Convolvulus tiliifolius* Desr.; *Argyrea tiliifolia* Wright; *Convolvulus melanostictus* Schl.] Thickets, St. Thomas; St. Jan; St. Croix.

#### POLEMONIACEAE

PHLOX DRUMMONDII Hook. Grown in flower gardens.

#### HYDROPHYLLACEAE

MARILAUNIDIUM JAMAICENSE (L.) Kuntze. [*Nama jamaicensis* L.; *Hydrolea jamaicensis* Vahl.] Dry, rocky situations, St. Thomas; St. Croix.

#### CORDIACEAE

CERDANA ALLIODORA R. & P. [*Cordia Gerascanthus* Jacq., not L.; *C. Gerascanthus subcanescens* of Eggers.] Woods and forests, St. Thomas; St. Jan.

SEBESTEN SEBESTENA (L.) Britton. [*Cordia Sebestena* L.; *C. Rickseckeri* Millsp.] Coastal thickets, hillsides, and planted for ornament, St. Thomas; St. Jan; St. Croix.

SEBESTEN BRACHYCALYX (Urban) Britton. [*Cordia Sebestena brachycalyx* Urban.] Rocky hillside, Buck Island, St. Thomas. Known otherwise only from Porto Rico.

CORDIA ALBA (Jacq.) R. & S. [*Varronia alba* Jacq.] Thickets and hillsides, St. Thomas; St. Croix. Sometimes planted.

CORDIA COLLOCOCCA L. [*C. micrantha* Sw.] Woods, forests and hills, St. Thomas; St. Jan; St. Croix.

CORDIA NITIDA Vahl. [? *C. laevigata* of Schlechtendal.] Forests and hills, St. Thomas; St. Jan; St. Croix.

CORDIA SULCATA DC. [*C. macrophylla* R. & S.] Forests and hills, St. Thomas; St. Jan; St. Croix (according to West).

VARRONIA CORYMBOSA (L.) Desv. [*Lantana corymbosa* L.; *Cordia*



*ulmifolia* Juss.; *C. ulmifolia* and varieties of Eggers.] Thickets, fields and hillsides, St. Thomas; St. Jan; St. Croix.

VARRONIA ANGUSTIFOLIA West. [*Cordia angustifolia* R. & S.; *C. cylindrostachya* and varieties of Eggers; *C. cylindrostachya* of Millspaugh.] Hillsides and thickets, St. Thomas; St. Croix (type locality).

CORDIA MARTINICENSIS R. & S. is accredited to St. Croix by Grisebach (Fl. 481); the record probably refers to *V. angustifolia*.

VARRONIA GLOBOSA Jacq. [*Cordia globosa* H.B.K.] Thickets, St. Thomas and St. Croix (according to West, Schlechtendal and Eggers).

BOURRERIA SUCCULENTA Jacq. [*Ehretia Bourreria* L.] Forests, hillsides and thickets, St. Thomas; St. Jan; St. Croix.

ROCHFORTIA ACANTHOPHORA (DC.) Griseb. [*Ehretia acanthophora* DC.; (?) *Ehretia spinosa* Jacq.] Thickets, St. Thomas; St. Jan; St. Croix (according to West and to Eggers).

#### BORAGINACEAE

TOURNEFORTIA FILIFLORA Griseb. [*T. foetidissima* DC. and of Eggers, not L.] St. Jan (according to Eggers); St. Croix (according to West).

TOURNEFORTIA HIRSUTISSIMA L. Thickets, banks and hills, St. Thomas; St. Jan; St. Croix.

TOURNEFORTIA BICOLOR Sw. [*T. laevigata* Lam.] Among rocks, Crown, St. Thomas.

TOURNEFORTIA LAURIFOLIA Vent., attributed to St. Thomas by Ventenat and by de Candolle, is known to us only from Porto Rico.

TOURNEFORTIA VOLUBILIS L. Thickets, St. Thomas; St. Jan; St. Croix (according to Eggers).

TOURNEFORTIA MICROPHYLLA Bert. [*T. volubilis microphylla* DC.; *T. volubilis microcarpa* of Millspaugh.] Thickets, St. Thomas; St. Jan; St. Croix.

MALLOTONIA GNAPHALODES (L.) Britton. [*Heliotropium gnaphalodes* L.; *Tournefortia gnaphalodes* R. Br.] Coastal sands, St. Thomas; St. Jan; St. Croix.

HELIOTROPIUM CURASSAVICUM L. Saline soil, St. Thomas; St. Jan; St. Croix.

HELIOTROPIUM PARVIFLORUM L. Banks, hillsides, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

HELIOTROPIUM INDICUM L. Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

HELIOTROPIUM TERNATUM Vahl. [*Heliotropium fruticosum* L.,

in part, and of Eggers and Millspaugh.] Rocky thickets and hillsides, St. Thomas; St. Jan; St. Croix.

HELIOTROPIMUM PERUVIANUM L. Cultivated in flower gardens.

### VERBENACEAE

LANTANA CAMARA L. [*L. scabrida* Ait.] Thickets and hillsides, St. Thomas; St. Jan; St. Croix.

LANTANA ACULEATA L. [*L. polyacantha* Schauer.] Waste grounds, St. Thomas; St. Croix.

LANTANA INVOLUCRATA L. [*L. odorata* L.; *Camara involucrata* Kuntze.] Thickets and hillsides. St. Thomas; St. Jan; St. Croix.

LANTANA RETICULATA Pers. Stony ground, King's Hill, St. Croix (according to Eggers).

LIPPIA REPTANS H.B.K. [*Lippia nodiflora* of Eggers and of Millspaugh.] Wet ground, St. Croix.

LIPPIA TRIPHYLLA (L'Her.) Kuntze. [*Aloysia citriodora* Ort.] Cultivated in gardens.

BOUCHEA PRISMATICA (L.) Kuntze. [*Verbena prismatica* L.; *B. Ehrenbergii* Cham.] Waste and cultivated grounds, St. Thomas; St. Croix.

VALERIANODES JAMAICENSIS (L.) Medic. [*Verbena jamaicensis* L.; *Stachytarpheta jamaicensis* Vahl; *Valerianodes jamaicensis indicus* Kuntze.] Fields, hills, banks and in cultivated grounds, St. Thomas; St. Jan; St. Croix.

VALERIANODES STRIGOSA (Vahl) Kuntze. [*Stachytarpheta strigosa* Vahl.] Thickets and hillsides, St. Thomas; St. Jan.

PRIVA LAPPULACEA (L.) Pers. [*Verbena lappulacea* L.; *V. mexicana* of West; *P. echinata* Juss.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

CITHAREXYLUM FRUTICOSUM L. [*C. cinereum* L.; *C. villosum* Jacq.] Woods, hills and thickets, St. Thomas; St. Jan; St. Croix.

CITHAREXYLUM SPINOSUM L. [*C. quadrangulare* Jacq.] Forests and slopes, St. Thomas; St. Croix. Planted for shade.

DURANTA ERECTA L. [*D. Plumieri* Jacq.; *D. Ellisia* Jacq.; ? *D. repens* L.] Thickets and hillsides, St. Thomas; St. Jan; St. Croix. Sometimes planted for ornament.

CALLICARPA RETICULATA Sw., accredited to St. Croix by West, is a little-known species of Jamaica; what plant West had in mind is not further recorded.

AEGIPHILA MARTINICENSIS Jacq. Forests, St. Thomas; St. Croix, common (according to Eggers).

PETITIA DOMINGENSIS Jacq. In forests, St. Croix, not common (according to Eggers).

VITEX DICARICATA Sw. Forests, St. Thomas; St. Jan; St. Croix (according to Eggers), and recorded from St. Croix by Swartz.

VITEX AGNUS-CASTUS L. Planted for ornament.

VOLKAMERIA ACULEATA L. [*Clerodendron aculeatum* Schlecht.; *C. aculeatum grandifolium* and *parvifolium* Kuntze; ? *C. longicollis* of Borgesen and Paulsen.] Thickets, St. Thomas; St. Jan; St. Croix.

CLERODENDRON FRAGRANS Vent. [*C. fragrans pleniflora* Schauer.] Waste grounds, St. Thomas.

SIPHONANTHUS INDICUS L. [*Clerodendron Siphonanthus* R. Br.] Woods near Grove Place and at Crequis, St. Croix. Apparently naturalized. Planted for ornament.

AVICENNIA NITIDA Jacq. [*A. tomentosa* Jacq.; *A. officinalis nitida* Kuntze.] Coastal swamps and lagoons, St. Thomas; St. Jan; St. Croix.

PETRAEA VOLUBILIS Jacq. Planted for ornament.

HOLMSKOLDIA SANGUINEA Retz. Planted for ornament.

VERBENA ICHAMAEDRIFOLIA Juss. Planted for ornament.

#### LAMIACEAE

LEONOTIS NEPETIFOLIA (L.) R. Br. [*Phlomis nepetifolia* L.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

LEONURUS SIBIRICUS L. Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

MOLUCCELLA LAEVIS L. St. Croix (according to West).

LEUCAS MARTINICENSIS (Jacq.) R. Br. [*Clinopodium martinicense* Jacq.] Waste and cultivated grounds, St. Croix.

SALVIA THOMASIANA Urban. [*S. tenella* of Schlechtendal and of Eggers.] St. Thomas. Endemic. Known only from a specimen collected long ago by Ehrenberg.

SALVIA OCCIDENTALIS Sw. [*S. occidentalis bicolor* Kuntze.] Banks, fields and thickets, St. Thomas; St. Jan; St. Croix.

SALVIA SEROTINA L. [*S. dominica* Sw.; *S. micrantha* Vahl.] Banks, fields and hillsides, St. Thomas; St. Jan; St. Croix.

SALVIA COCCINEA B. Juss. [*S. coccinea ciliata* Griseb.; *S. coccinea pseudococcinea* Kuntze.] Hillsides, waste and cultivated grounds, St. Thomas; St. Croix; St. Jan.

MENTHA AQUATICA L. Naturalized along rivulets, Caledonia, St. Croix, not seen flowering (according to Eggers). Perhaps, if the flowers were known, referable to some other species.

HYPTIS CAPITATA Jacq. [*Mesosphaerum capitatum* Kuntze.] Moist grounds, St. Thomas; St. Jan; St. Croix.

HYPTIS SUAVEOLENS (L.) Poir. [*Ballota suaveolens* L.; *Mesosphaerum suaveolens* Kuntze.] Thickets, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

HYPTIS PECTINATA (L.) Poir. [*Nepeta pectinata* L.; *Mesosphaerum pectinatum* Kuntze.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

HYPTIS VERTICILLATA Jacq. [*Mesosphaerum verticillatum* Kuntze.] St. Thomas (according to Bentham and to Grisebach).

COLEUS AMBOINICUS Lour. Banks and hillsides, naturalized, St. Thomas; St. Jan (according to Eggers); St. Croix.

OCIMUM MICRANTHUM Willd. Banks, fields and hillsides; St. Thomas; St. Jan; St. Croix.

OCIMUM BASILICUM L. Grown as a garden herb.

ROSMARINUS OFFICINALIS L. Grown as a garden herb.

THYMUS VULGARIS L. Grown as a garden herb.

ORIGANUM MAJORANA L. Grown as a garden herb.

### SOLANACEAE

PHYSALIS ANGULATA L. [*P. ramosissima* Mill.; *P. Linkiana* Griseb., not Nees.] Fields, banks, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

PHYSALIS PUBESCENS L. [*P. angulata dubia* Kuntze.] Dry soil, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

PHYSALIS TURBINATA Medic. Dry soil, St. Jan; St. Croix.

PHYSALIS EGGERSII O. E. Schulz. Water Island, St. Thomas. Endemic. A species known only from the type specimen. We searched Water Island for it in 1913, but could find nothing answering the description.

PHYSALIS PERUVIANA L., recorded by Eggers as found in fields at Rapoon, St. Thomas, prior to 1879, was, apparently, erroneously determined (see Schulz in Urban, Symb. Ant. 6: 149).

CAPSICUM FRUTESCENS L. Roadsides and woods, St. Thomas; St. Jan; St. Croix.

CAPSICUM BACCATUM L. [*Capsicum annuum baccatum* Kuntze.] Thickets, banks and woods, St. Thomas; St. Jan; St. Croix (according to Eggers).

CAPSICUM ANNUM L. Cultivated for food.

CAPSICUM DULCE Dunal. Cultivated for food.

SOLANUM LANCEIFOLIUM Jacq. King's Hill, St. Jan.

SOLANUM JAMAICENSE Mill. St. Thomas, collected by Richard (according to Poiret).

SOLANUM NIGRUM L. [*S. americanum* Mill.; *S. nigrum nodiflorum* A. Gray; *S. nodiflorum* Dunal, not Jacq.] Thickets, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

SOLANUM SEAFORTHIANUM Andr. Spontaneous after cultivation, St. Thomas; St. Croix. Planted for ornament.

SOLANUM VERBASCIFOLIUM L. Hillsides and thickets, St. Thomas; St. Jan; St. Croix.

SOLANUM CONOCARPUM L. C. Rich. Coral Bay, St. Jan. Endemic.

SOLANUM MUCRONATUM O. E. Schulz. St. Thomas; St. Jan; otherwise known only from Porto Rico.

SOLANUM MAMMOSUM L. Waste grounds, St. Croix.

SOLANUM PERSICIFOLIUM Dunal. [*S. persicifolium Belloi* O. E. Schulz; *S. persicifolium parvifolium* (Vahl) O. E. Schulz.] Hillsides and thickets, St. Thomas; St. Jan; St. Croix.

SOLANUM RACEMOSUM L. [*S. ignaeum* L.; *S. bahamense* of Eggers.] Thickets, St. Thomas; St. Jan; St. Croix.

SOLANUM TORVUM Sw. Hillsides, woods and waste grounds, St. Thomas; St. Jan; St. Croix.

SOLANUM POLYGAMUM Vahl. [*S. inclusum* and *S. inclusum albiflorum* of Eggers; *S. polygamum thomae* Kuntze; *S. hirtum* of Borgesen & Paulsen.] Thickets, St. Thomas; St. Jan; St. Croix.

SOLANUM ACULEATISSIMUM Jacq. Naturalized by mules from Montevideo at Frederiksted, St. Croix (according to Eggers).

SOLANUM TUBEROSUM L. Cultivated for food.

SOLANUM MELONGENA L. [*S. insanum* L.] Cultivated for food.

SOLANUM MACROCARPUM L. Cultivated on St. Croix (according to Schulz).

SOLANUM PSEUDOCAPSICUM L. Cultivated for its fruit.

LYCOPERSICUM LYCOPERSICUM (L.) Karst. [*Solanum Lycopersicum* L.; *Lycopersicum esculentum* Mill.; *L. cerasiforme* Dunal.] Spontaneous after cultivation for food, St. Thomas; St. Jan; St. Croix.

DATURA STRAMONIUM L. [*Datura Tatula* L.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

DATURA METEL L. Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

DATURA FASTUOSA L. Spontaneous after cultivation, St. Thomas; St. Jan; St. Croix.

DATURA SUAVEOLENS H. & B. Cultivated for ornament.

CESTRUM NOCTURNUM L. Forests, Rogiers and Joshee Gut, St. Jan (according to Eggers). Planted on St. Croix.

CESTRUM LAURIFOLIUM L'Her. [*C. diurnum* of West and of Eggers; *C. laurifolium neglectum* Kuntze.] Forests and thickets, St. Thomas; St. Jan; St. Croix.

CESTRUM ALTERNIFOLIUM (Jacq.) O. E. Schulz. [*Ixora alternifolia* Jacq.; *Cestrum vespertinum* L.] St. Thomas (according to O. E. Schulz).

NICOTIANA TABACUM L. Spontaneous after cultivation, St. Thomas; St. Jan; St. Croix.

BRUNFELSIA AMERICANA L. [*B. americana pubescens* Griseb.] Thickets and hillsides, St. Thomas; St. Jan; St. Croix. Sometimes planted for ornament.

Petunias are planted in gardens.

### SCROPHULARIACEAE

MECARDONIA PROCUMBENS (Mill.) Small. [*Erinus procumbens* Mill.; *Herpestis chamaedryoides* H.B.K.; *Lindernia dianthera* Sw.; *Monniera dianthera* Millsp.] Wet grounds, St. Croix.

HERPESTIS STRICTA Schrad., accredited to St. Thomas by Bentham, according to Eggers, is probably an error in record.

BRAMIA MONNIERA (L.) Drake. [*Gratiola Monniera* L.; *Herpestis Monniera* H.B.K.; *Monniera Monniera* Britton; *M. calycina* Kuntze.] Wet sandy or muddy situations, St. Thomas; St. Jan; St. Croix.

CAPRARIA BIFLORA L. [*C. biflora pilosa* of Eggers.] Fields, banks, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

VANDELLIA DIFFUSA L. St. Croix (according to Eggers).

SCOPARIA DULCIS L. [*Capraria dulcis* Kuntze.] Wet or moist situations and in cultivated grounds, St. Thomas; St. Jan; St. Croix.

RUSSELLIA EQUISETIFORMIS Schl. & Cham. [*R. juncea* Zucc.] Cultivated for ornament.

MAURANDYA BARCLAYANA Lindl. Cultivated for ornament.

### BIGNONIACEAE

MACRODISCUS LACTIFLORUS (Vahl) Bureau. \* [*Bignonia lactiflora* Vahl; *Distictis lactiflora* DC.] Thickets and roadsides, St. Croix. Cultivated on St. Thomas (according to Eggers).

CYDISTA AEQUINOCTIALIS (L.) Miers. [*Bignonia aequinoctialis* L.; *B. spectabilis* Vahl.] Forests and thickets, St. Thomas; St. Jan; St. Croix.

BATOCYDIA UNGUIS (L.) Mart. [*Bignonia Unguis* L.] Forests, St. Thomas; St. Jan; St. Croix.

MACROCATALEA LONGISSIMA (Jacq.) Britton. St. Thomas (according to Grisebach). The record is probably erroneous.

TABEBUIA HETEROPHYLLA (DC.) Britton. [*Raputia* (?) *heterophylla* DC.; *Tecoma Berterii* of Eggers, not DC.; *Tecoma triphylla* of Kuntze; *Tecoma Leucoxydon* Mart.; *Tecoma pentaphylla Leucoxydon* Kuntze.] Dry thickets, especially near the coasts, St. Thomas; St. Jan.

TABEBUIA PALLIDA Miers. [*Bignonia pentaphylla* L.; *Tecoma pentaphylla* Juss., not *Tabebuia pentaphylla* Hemsl.; *T. Leucoxydon* of Eggers.] Forests and hills and much planted for shade, St. Thomas; St. Jan; St. Croix.

TECOMA STANS (L.) Juss. [*Bignonia stans* L.; *Stenolobium stans* Seem.; *Gelsemium stans* Kuntze.] Thickets and hillsides, St. Thomas; St. Jan; St. Croix. Sometimes planted for ornament.

TECOMARIA CAPENSIS (Thunb.) Spach. [*Bignonia capensis* Thunb.; *Tecoma capensis* Lindl.] Roadsides, St. Thomas. Planted for ornament, St. Thomas; St. Croix.

ENALLAGMA LATIFOLIA (Mill.) Small. [*Crescentia latifolia* Mill.; *Crescentia cucurbitina* L.; *C. cucurbitina heterophylla* Kuntze; *E. cucurbitina* Baill.] Forests near rivulets, St. Thomas; St. Jan; St. Croix.

CRESCENTIA CUJETE L. Forests, hillsides and much planted for its fruit, St. Thomas; St. Jan; St. Croix.

CRESCENTIA LINEARIFOLIA Miers. Collected by Oersted on St. Thomas (according to Miers); coastal hill, Lamosure, St. Jan.

#### PEDALIACEAE

SESAMUM ORIENTALE L. [*S. indicum* L.] Spontaneous after cultivation, St. Thomas. Cultivated for its seeds.

#### MARTYNIACEAE

MARTYNI ANNUA L. [*M. diandra* Glox.] Waste and cultivated grounds, St. Thomas; St. Croix.

#### ACANTHACEAE

THUNBERGIA FRAGRANS Roxb. [*T. volubilis* Pers.] Hedges and thickets and along ditches, St. Thomas; St. Jan; St. Croix.

THUNBERGIA ALATA Bojer. Banks and waste grounds, St. Thomas. St. Jan; St. Croix. Planted for ornament.

BLECHUM BROWNEI Juss. [*B. Brownei subcordatum* and (?) *laxum* Kuntze.] Fields, banks, woods and thickets, St. Thomas; St. Jan; St. Croix.

RUELLIA TUBEROSA L. [*R. clandestina* L.] Grassy situations, St. Thomas; St. Jan; St. Croix.

RUELLIA COCCINEA (L.) Vahl. [*Barleria coccinea* L.; *Stemona-canthus coccineus* Griseb.] Thickets, St. Thomas; St. Jan; St. Croix.

RUELLIA STREPENS L., recorded by de Candolle as found on St. Croix by Isert, must be an error in locality; the specimen is preserved in the Willdenow herbarium.

GERARDIA TUBEROSA L. [*Stenandrium tuberosum* Urban; *S. rupestre* Nees.] Rocky woods and thickets, St. Thomas; St. Jan.

ANTHACANTHUS SPINOSUS (Jacq.) Nees. [*Justicia spinosa* Jacq.; *A. microphyllus* and *A. jamaicensis* of Eggers; *Jasminum coeruleum*

Kuntze.] Woods, hillsides and thickets, St. Thomas; St. Jan; St. Croix.

ANTHACANTHUS ACICULARIS (Sw.) Nees, attributed by West and by Lindau to St. Croix, is known to me only from Jamaica. [*Justicia acicularis* Sw.]

ODONTONEMA NITIDUM (Jacq.) Kuntze. [*Justicia nitida* Jacq.; *Thysacanthus nitidus* Nees.] St. Thomas and St. Croix, at least formerly.

DREJERELLA MIRABILOIDES (Lam.) Lindau. [*Justicia mirabiloides* Lam.; *Beleperone nemorosa* of Eggers.] Shaded situations, St. Thomas; St. Jan; St. Croix.

DIAPEDIUM ASSURGENS (L.) Kuntze. [*Justicia assurgens* L.; *Dicliptera assurgens* Juss.] Banks, thickets and waste grounds, St. Thomas; St. Jan; St. Croix.

JUSTICIA PERIPLOCIFOLIA Jacq. [*J. reflexiflora* Vahl and var. *glandulosa* Eggers; *Ecbolium reflexiflorum* Kuntze.] Thickets, St. Thomas; St. Jan; St. Croix.

JUSTICIA PECTORALIS Jacq. [*Dianthera pectoralis* Gmelin.] Waste and cultivated moist grounds, St. Thomas; St. Jan (according to Eggers); St. Croix.

JUSTICIA SESSILIS Jacq. [*J. pauciflora* Vahl; *Dianthera sessilis* Gmelin; *Siphonoglossa sessilis* Oerst.] Thickets and hillsides, St. Thomas; St. Jan; St. Croix.

JUSTICIA CARTHAGINENSIS Jacq. Woodlands, hillsides and waste grounds, St. Thomas; St. Croix.

JUSTICIA SECUNDA Vahl. Thickets, St. Croix (according to Lindau).

BARLERIA LUPULINA Lindl. Waste grounds, St. Thomas; St. Jan.

BARLERIA HIRSUTA Jacq., recorded from St. Thomas by West, is a species unknown to modern botanists except from description and the published illustrations of Jacquin (Obs. 2: *pl.* 32; Icon. Pict. *pl.* 172); it has been referred to *Duggena spicata* of the Rubiaceae, but the description of its flowers does not apply to that plant.

CROSSANDRA INFUNDIBULIFORMIS (L.) Nees. Cultivated for ornament.

GRAPTOPHYLLUM PICTUM (L.) Griff. [*G. hortense* Nees.] Cultivated for ornament.

PSEUDERANTHEMUM BICOLOR (Schrank) Radlk. [*Justicia bicolor* Sims.] Cultivated for ornament.

ERANTHEMUM NERVOSUM R. Br. Cultivated for ornament.

PACHYSTACHYS COCCINEA Nees. Cultivated for ornament.



## MYOPORACEAE

BONTIA DAPHNOIDES L. Coastal thickets, St. Thomas; St. Jan; St. Croix at Turner's Hole (according to Eggers).

## PLANTAGINACEAE

PLANTAGO MAJOR L. [*P. major tropica* Griseb.] Waste grounds, St. Thomas; St. Croix.

## RUBIACEAE

OLDENLANDIA CORYMBOSA L. Waste places, Government House yard, St. Croix (according to Eggers).

OLDENLANDIA CALLITRICHOIDES Griseb. Gregarious among stones, Government House, St. Croix (according to Eggers).

RONDELETIA PILOSA Sw. [*R. triflora* Vahl.] Thickets, St. Thomas; St. Jan; near Cave Bay, St. Croix (according to Eggers).

EXOSTEMA CARIBAEUM (Jacq.) R. & S. [*Cinchona caribaea* Jacq.] Thickets and hillsides, St. Thomas; St. Jan; St. Croix.

DUGGENA SPICATA (Lam.) Standley. [*Lygistum spicatum* Lam.; *Gonzalia spicata* DC.; *Gonzalagunia spicata* Maza.] Grassy situations on high hills, St. Thomas; St. Jan.

RANDIA FORMOSA (Jacq.) K. Schum. [*Mussaenda formosa* Jacq.; *Gardenia armata* Sw.; *Randia Mussaenda* DC.] Roadsides, St. Croix. Planted for ornament.

RANDIA ACULEATA L. [*R. latifolia* Lam.; *Gardenia Randia* Sw.; *R. aculeata mitis* of Eggers.] Thickets, woods and hillsides, St. Thomas; St. Jan; St. Croix.

GENIPA AMERICANA L. Forests on the higher hills, St. Thomas; St. Jan.

HAMELIA PATENS Jacq. Valleys and hillsides, St. Croix; St. Thomas (according to Eggers).

HAMELIA AXILLARIS Sw. [*H. lutea* Rohr.] Forests and wet thickets, St. Thomas; St. Croix.

CATESBAEA MELANOCARPA Krug & Urban. [*C. parviflora* of Eggers, not Sw.] Thickets, Fair Plain, St. Croix (according to Eggers).

GUETTARDA SCABRA (L.) Lam. [*Matthiola scabra* L.; *G. rugosa* Sw.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

GUETTARDA PARVIFLORA Vahl. [*G. parvifolia* Sw.] Thickets, woods and hillsides, St. Thomas; St. Jan; St. Croix.

GUETTARDA ELLIPTICA Sw. Hillside near Charlotte Amalia, St. Thomas.

STENOSTOMUM LUCIDUM (Sw.) Gaertn. f. [*Laugeria lucida* Sw.; *Antirrhoea lucida* Hook.] Forests, St. Thomas; St. Croix.

ERITHALIS FRUTICOSA L. [*E. odorifera* Jacq.] Thickets along the coast, St. Thomas; St. Jan; St. Croix.

CHIOCOCCA ALBA (L.) Hitchc. [*Lonicera alba* L.; *C. racemosa* L.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

CHIONE VENOSA (Sw.) Urban. [*Jacquinia venosa* Sw.; *Chione glabra* DC.] In forests, rare, not seen flowering, Fair Plain, St. Croix and Soldier Bay, St. Thomas (according to Eggers). Found on Tortola, according to A. Richard.

SCOLOSANTHUS VERSICOLOR Vahl. Thickets, St. Thomas; St. Jan; St. Croix. Known otherwise only from Porto Rico and Vieques.

COFFEA ARABICA L. [*C. liberica* of Millspaugh.] Spontaneous after cultivation, St. Thomas; St. Jan; St. Croix. Cultivated for coffee.

IXORA FERREA (Jacq.) Benth. [*Sideroxyloides ferreum* Jacq.] Forests and rocky hill-tops; St. Thomas; St. Jan.

IXORA STRICTA Roxb. Planted for ornament.

IXORA BANDHUCA Roxb. Planted for ornament.

PSYCHOTRIA PINNULARIS Sessé & Moç. [*P. horizontalis* Griseb. and of Eggers and of Millspaugh, not Sw.] Thickets, St. Thomas; St. Jan; St. Croix.

PSYCHOTRIA UNDATA Jacq. [*P. glabrata* of Eggers.] Thickets, St. Thomas; St. Jan; St. Croix.

PSYCHOTRIA BROWNEI Spreng. [*C. asiatica* of West; *C. tenuifolia* of Millspaugh.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

PSYCHOTRIA TENUIFOLIA Sw. Thickets, Crown, St. Thomas (according to Eggers and cited also by Urban); St. Croix (according to West).

PSYCHOTRIA PUBESCENS Sw. St. Thomas (according to Urban).

PALICOUREA DOMINGENSIS (Jacq.) DC. [*Psychotria domingensis* Jacq.; *P. Pavetta* Sw.; *Palicourea Pavetta* DC.; *P. Pavetta rosea* Eggers.] Forests and thickets, St. Thomas; St. Jan; St. Croix.

GEOPHILA HERBACEA (Jacq.) K. Schum. [*Psychotria herbacea* Jacq.; *G. reniformis* C. & S.] In dense woods, Signal Hill and St. Peter, St. Thomas (according to Eggers); wooded hill, Bordeaux, St. Jan.

FARAMEA OCCIDENTALIS (L.) A. Rich. [*Ixora occidentalis* L.; *Faramea odoratissima* DC.] Forests and thickets, St. Thomas; St. Jan; St. Croix, at least formerly.

MORINDA CITRIFOLIA L. Roadsides and thickets, St. Thomas; St. Croix.

ERNODEA LITTORALIS Sw. Coastal sands, St. Thomas; St. Jan; St. Croix.

DIODIA RIGIDA C. & S. Dry soil, St. Thomas.

DIODIA MARITIMA Thonn. [*D. radicans* of Borgesen and Paulsen.] Coastal sands, Water Island, St. Thomas.

DIODIA SARMENTOSA Sw. St. Thomas (according to Schlechtendal).

BORRERIA LAEVIS (Lam.) Griseb. [*Spermacoce laevis* Lam.; *Borreria vaginata* Cham. & Schl.] Dry soil, St. Thomas; St. Jan; St. Croix.

BORRERIA OCIMOIDES (Burm. f.) DC. [*Spermacoce ocimoides* Burm. f.; *Borreria parviflora* Meyer.] Banks, fields, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

BORRERIA VERTICILLATA (L.) Meyer. [*Spermacoce verticillata* L.; *B. stricta* DC., not Meyer.] Grassy places, St. Thomas; St. Croix (according to Eggers).

SPERMACOCE TENUIOR L. [*S. tenuior angustifolia* Eggers.] Banks, fields, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

GARDENIA JASMINOIDES Ellis. [*G. florida* L.] Planted for ornament.

PORTLANDIA GRANDIFLORA L. Planted for ornament.

VANGUERIA EDULIS Vahl. [*Varanga edulis* Vahl] Cultivated on St. Croix (according to West).

#### CAPRIFOLIACEAE

LONICERA JAPONICA Thunb. Planted for ornament.

LONICERA CAPRIFOLIUM L. Cultivated (according to Eggers).

SAMBUCUS NIGRA L. Cultivated (according to Eggers).

#### CUCURBITACEAE

MELOTHRIA GUADALUPENSIS (Spreng) Cogn. [*Bryonia guadalupensis* Cogn.; *M. pervaga* Griseb.] Thickets, St. Thomas; St. Jan; St. Croix.

MELOTHRIA FLUMINENSIS Gardn. [*M. pendula* Meyer.] St. Croix (according to West and to Cogniaux).

CORALLOCARPUS EMETOCATHARTICUS (Gros.) Cogn. [*Doyerea emetocathartica* Grosourdy; *Anguria glomerata* Eggers; *Corallocarpus glomeratus* Cogn.] Forests, St. Thomas; St. Croix.

ANGURIA PLUMIERIANA Schl. [*A. trilobata* West and of Eggers.] St. Croix.

MOMORDICA CHARANTIA L. Hedges, fences and waste grounds, St. Thomas; St. Jan; St. Croix.

MOMORDICA BALSAMINA L. Cultivated for its fruit, St. Croix.

LUFFA CYLINDRICA (L.) Roemer. [*Momordica cylindrica* L.; ? *M. operculata* of West.] Spontaneous after cultivation, St. Thomas; St. Croix.

LUFFA ACUTANGULA (L.) Roxb., accredited to St. Thomas by Cogniaux as collected by Finlay, was really from Trinidad.

CUCUMIS ANGURIA L. Fields and banks, St. Thomas; St. Jan; St. Croix.

CUCUMIS SATIVUS L. Cultivated for its fruit.

CUCUMIS MELO L. Cultivated for its fruit.

CUCURBITA LAGENARIA L. [*Lagenaria vulgaris* Ser.; *L. vulgaris viscosa* Eggers; *L. Lagenaria* Cockerell.] Waste grounds, spontaneous after cultivation, St. Thomas; St. Croix. Cultivated for its fruit.

CUCURBITA FICIFOLIA Bouché is recorded by Millspaugh as escaped from cultivation on St. Croix.

**Pepo moschata** (Duch.) Britton. [*Cucurbita moschata* Duch.; *C. Pepo* of Eggers.] Spontaneous after cultivation, St. Thomas; St. Croix.

CAYAPONIA AMERICANA (Lam.) Cogn. [*Bryonia americana* Lam.; *B. ficifolia* Vahl; *Trianosperma graciliflora* Griseb.; *T. ficifolia* of Eggers; *Cayaponia graciliflorum* Griseb.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

SECHIUM EDULE (Jacq.) Sw. Cultivated for its fruit.

CITRULLUS CITRULLUS (L.) Karst. [*C. vulgaris* Schrad.] Cultivated for its fruit.

COCCINIA CORDIFOLIA (L.) Cogn. [*Cephalandra indica* Naud.] Cultivated; recorded by Eggers as naturalized in shaded valleys, St. Croix.

#### LOBELIACEAE

ISOTOMA LONGIFLORA (L.) Presl. [*Lobelia longiflora* L.] Moist banks, fields and hillsides, St. Thomas; St. Jan; St. Croix (according to Eggers).

#### GOODENIACEAE

SCAEVOLA PLUMIERII (L.) Vahl. [*Lobelia Plumierii* L.] Coastal sands, St. Thomas; St. Croix.

#### CICHORIACEAE

SONCHUS OLERACEUS L. Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

LACTUCA INTYBACEA Jacq. [*Brachyramphus intybaceus* DC.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

LACTUCA SATIVA L. Cultivated for salad.

#### AMBROSIACEAE

XANTHIUM LONGIROSTRE Wallr. [*X. orientale* of Schlechtendal; *X. macrocarpum* of Eggers; *X. strumarium* of Millspaugh; *X. echi-*

*natum* of Urban.] Waste and cultivated grounds, St. Thomas; all islands (according to Eggers).

AMBROSIA CUMANENSIS H.B.K. [*A. artemisiaefolia trinitensis* Griseb.] Waste places, St. Croix (according to Eggers).

## CARDUACEAE

STRUCHIUM SPARGANOPHORUM (L.) Kuntze. [*Ethulia sparganophora* L.; *Sparganophorus Vaillantii* Crantz.] Moist grounds, St. Thomas (according to Eggers).

VERNONIA SERICEA L. C. Rich. [*Lepidoploa phyllostachya* Cass.; *Vernonia arborescens Swartziana*, *Lessingiana* and *divaricata* of Eggers; *V. arborescens* of Schlechtendal and of Millspaugh; *V. phyllostachya* Gleason; *Cacalia arborescens Lessingiana* Kuntze.] Thickets, St. Thomas; St. Jan; St. Croix.

VERNONIA ALBICAULIS Pers. [*V. longifolia* Pers.; *V. Vahliana* Less.; *V. thomae* Benth.; *V. punctata* of Eggers and of Millspaugh; *Cacalia thomae* Kuntze; ? *Conyza fruticosa* of West.] Thickets, St. Thomas; St. Jan; St. Croix.

VERNONIA CINEREA (L.) Less. [*Conyza cinerea* L.] Waste and cultivated grounds, St. Thomas; St. Croix.

PIPTOCOMA RUFESCENS Cass. Thickets, Water Island, St. Thomas; St. Jan.

ELEPHANTOPUS MOLLIS H.B.K. [*E. tomentosus* of Millspaugh.] Banks, fields and hillsides, St. Thomas; St. Jan; St. Croix.

PSEUDELEPHANTOPUS SPICATUS (Juss.) Rohr. [*Elephantopus spicatus* Juss.; *Distreptus spicatus* Rohr.] Banks, fields, hillsides and cultivated grounds, St. Thomas; St. Jan; St. Croix.

AGERATUM CONYZOIDES L. [*Carelia conyzoides robusta* Kuntze.] Banks, fields and roadsides, St. Thomas; St. Jan; St. Croix.

EUPATORIUM MACROPHYLLUM L. [*Hebeclinium macrophyllum* DC.] Forests, St. Thomas; St. Croix (according to West and to Eggers).

EUPATORIUM ODORATUM L. [*E. conyzoides* Vahl.] Banks, hillsides and thickets, St. Thomas; St. Jan; St. Croix.

EUPATORIUM CUNEIFOLIUM Willd., cited by Eggers from DeCandolle (Prodr. 5: 177) as from St. Thomas, was not from our island St. Thomas.

EUPATORIUM ATRIPLICIFOLIUM Lam. [*E. repandum* Willd.; *Erigeron atriplicifolium* of Millspaugh.] Hillsides and coastal thickets, St. Thomas; St. Jan; St. Croix.

EUPATORIUM SINUATUM Lam. [*E. canescens* Vahl.] Rocky thickets, St. Thomas (according to DeCandolle); rocky hillsides, St. Jan; St. Croix.

EUPATORIUM TRIPLINERVE Vahl. [*E. Ayapana* Vent.] Cultivated on St. Croix.

EUPATORIUM CAPILLIFOLIUM (Lam.) Small. [*E. foeniculaceum* Willd.] Cultivated on St. Croix (according to Millspaugh).

MIKANIA CORDIFOLIA (L. f.) Willd. [*Cacalia cordifolia* L. f.; ? *Eupatorium denticulatum* of Schlechtendal; *Mikania gonoclada* DC.; *Willughbaea cordifolia* Kuntze; *W. gonoclada* Millsp.] Thickets, St. Thomas; St. Jan; St. Croix.

ERIGERON CUNEIFOLIUS DC. Grassy places and banks on the higher hills, St. Thomas; St. Jan.

ERIGERON SPATHULATUS Vahl. Grassy situations, St. Thomas; St. Jan; St. Croix.

LEPTILON PUSILLUM (Nutt.) Britton. [*Erigeron pusillum* Nutt.; *Erigeron canadense* of Schlechtendal and of Eggers; *Leptilon canadense* of Millspaugh.] Grassy places, waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

LEPTILON LINIFOLIUM (Willd.) Small. [*Erigeron linifolium* Willd.; *Conyza ambigua* DC.] Waste grounds, St. Thomas.

PLUCHEA PURPURASCENS (Sw.) DC. [*Conyza purpurascens* Sw.; *P. camphorata* of Millspaugh.] Wet grounds, St. Thomas; St. Croix.

PLUCHEA ODORATA (L.) Cass. [*Conyza odorata* L.; *C. carolinensis* Jacq.; *P. odorata normalis* Kuntze.] Thickets and hillsides and in cultivated grounds, St. Thomas; St. Jan; St. Croix.

BACCHARIS DIOICA Vahl. [*B. Vahlia* DC.] Coastal rocks, St. Croix.

EGETES PROSTRATA (Sw.) Kuntze. [*Matricaria prostrata* Sw.; *Pyrethrum simplicifolium* Willd.; *E. domingensis* Cass.] Sandy shores, St. Thomas.

PTEROCAULON VIRGATUM (L.) DC. [*Gnaphalium virgatum* L.; *Conyza virgata* L.; *Pluchea virgata* Schl.] Hillsides and banks, St. Thomas; St. Jan; St. Croix.

NOCCA MOLLIS (Cav.) Jacq. [*Lagascea mollis* Jacq.] Waste grounds, St. Thomas.

MELAMPODIUM DIVARICATUM (L. C. Rich.) DC. [*Dysodium divaricatum* L. C. Rich.; *M. paludosum* H.B.K.] Ditches, St. Croix.

PARTHENIUM HYSTEROPHORUS L. Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

CRASSINA MULTIFLORA (L.) Kuntze. [*Zinnia multiflora* L.] Roadsides and banks, St. Thomas; St. Jan.

CRASSINA ELEGANS (Jacq.) Kuntze. Grown in flower gardens.

VERBESINA ALBA L. [*Eclipta alba* Hassk.; *E. punctata* L.; *E. erecta* L.] Wet grounds, St. Thomas; St. Jan; St. Croix.

ACANTHOSPERMUM HISPIDUM DC. [*A. humile* of Eggers.] Waste and cultivated grounds, St. Thomas; St. Croix.

BORRICHIA ARBORESCENS (L.) DC. [*Bupthalmum arborescens* L.; *B. argentea* DC.] Coastal rocks and sands, St. Thomas; St. Croix.

WEDELIA TRILOBATA (L.) Hitchc. [*Silphium trilobatum* L.; *W. carnosa* L. C. Rich.] Moist grounds, St. Thomas; St. Croix.

WEDELIA CALYCINA L. C. Rich. [*Bupthalmum helianthoides* of West.] Thickets, St. Thomas; St. Croix.

WEDELIA PARVIFLORA L. C. Rich. [*W. bupthalmoides* of Eggers and of Millspaugh; *W. affinis* DC.; *W. acapulcensis* of Schlechtendal; *W. brachycarpa* of Millspaugh, St. Thomas; *Sereneum frutescens* of Kuntze.] Dry hills and thickets, St. Thomas; St. Jan.

WEDELIA CRUCIANA L. C. Rich. [*W. bupthalmoides* of Millspaugh.] Dry rocky soil, St. Croix. Endemic.

ELEUTHERANTHERA RUDERALIS (Sw.) Sch. Bip. [*Melampodium ruderale* Sw.; *Ogiera ruderalis* Griseb.; *Wedelia discoidea* Less.] Banks, fields and waste grounds, St. Thomas; St. Jan; St. Croix.

MELANTHERA CANESCENS (Kuntze) O. E. Schulz. [*Amellus asper canescens* Kuntze; *M. Linnaei* of Schlechtendal; *M. deltoidea* of Eggers.] Hillsides and thickets, St. Thomas.

TEPION ALATUM (L.) Britton. [*Verbesina alata* L.] Waste and cultivated ground, St. Thomas; St. Croix.

SCLEROCARPUS AFRICANUS Jacq. Waste grounds, St. Thomas.

SYNEDRELLA NODIFLORA (L.) Gaertn. [*Verbesina nodiflora* L.; *Ucacou nodiflorum* Hitchc.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

BIDENS PILOSA L. [*Coreopsis leucantha* L.; *B. leucantha* Willd.; *B. pilosa dubia* O. E. Schulz; ? *B. pilosa subbitermata* Kuntze.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

BIDENS CYNAPIIFOLIA H.B.K. [*B. bipinnata* of West, of Eggers and of Millspaugh.] Waste and cultivated grounds, St. Thomas; St. Jan; St. Croix.

COSMOS CAUDATUS H.B.K. [*Bidens Berteriana* Spreng.] Grassy fields, banks, and in waste grounds, St. Thomas; St. Jan; St. Croix.

POROPHYLLUM POROPHYLLUM (L.) Kuntze. [*Cacalia Porophyllum* L.; *Porophyllum ellipticum* Cass.] Waste grounds, St. Thomas.

PECTIS HUMIFUSA Sw. [*P. serpyllifolia* Pers.] Stony banks, fields, and hillsides, St. Thomas; St. Jan; St. Croix.

PECTIS LINIFOLIA L. [*Pectis punctata* Jacq.; *Pectidium punctatum* Less.] Rocky hillsides, banks and thickets, St. Thomas; St. Jan; St. Croix.

PECTIS FEBRIFUGA H. van Hall. [*P. Swartziana* of Borgesen and Paulsen.] Grassy places, St. Thomas; St. Croix.

NEUROLAENA LOBATA (L.) R. Br. [*Conyza lobata* L.] Woodlands, St. Thomas.

ERECHTHITES HIERACIFOLIA (L.) Raf. [*Senecio hieracifolius* L.; *E. praealta* Raf.; *E. hieracifolia cacalioides* of Eggers and of Kuntze.] Banks, fields, waste and cultivated grounds, St. Thomas; St. Croix.

EMILIA SONCHIFOLIA (L.) DC. [*Cacalia sonchifolia* L.; *E. sonchifolia sagittata* of Kuntze.] Banks, fields, waste and cultivated grounds, St. Thomas; St. Croix; St. Jan.

EMILIA SAGITTATA (Vahl) DC. Grown in flower gardens.

CHAPTALIA NUTANS (L.) Polak. [*Tussilago nutans* L.; *Leria nutans* DC.] Woods and thickets, St. Thomas; St. Jan; St. Croix.

CHRYSOGANUM DICHOTOMUM Vahl, of St. Croix, is unknown to me; it is certainly not a *Chrysogonum*.

HELIANTHUS ANNUUS L. Grown in gardens.

CHRYSANTHEMUM INDICUM L. [*Pyrethrum indicum* Cass.] Grown in gardens.

ASTER CHINENSIS L. Grown in gardens.

TAGETES PATULA L. Grown in gardens.

TITHONIA TAGETIFLORA Desf. [*T. speciosa* Hook.] Grown in gardens.

GEORGINA VARIABILIS Willd. Grown in gardens (according to Eggers).

TARCHONANTHUS CAMPHORATUS L. Cultivated on St. Croix (according to Eggers).

#### PINACEAE

THUJA ORIENTALIS L. Planted for ornament.

JUNIPERUS BERMUDIANA L. Planted on St. Croix (according to West).

#### CYCADACEAE

CYCAS REVOLUTA Thunb. Planted for ornament.

#### PTERIDOPHYTA

##### CYATHEACEAE

CYATHEA ARBOREA (L.) J. E. Smith. [*Polypodium arboreum* L.; ? *C. Serra* of Kuhn.] Forests, high hills, St. Thomas.

##### POLYPODIACEAE

DRYOPTERIS PATENS (Sw.) Kuntze. [*Polypodium patens* Sw.; *Aspidium patens* Sw.] Forests, high hills of St. Thomas; St. Croix.

DRYOPTERIS OLIGOPHYLLA Maxon. [*Polypodium invisum* Sw.] St. Thomas (according to Christensen).

DRYOPTERIS INCISA (Sw.) Kuntze. [*Polypodium incisum* Sw.] St. Croix (West, according to Eggers).



DRYOPTERIS SPRENGELII (Kaulf.) Kuntze. [*Dryopteris Balbisii* Urban; *Polypodium Balbisii* Spreng.] St. Thomas (according to Kuhn).

DRYOPTERIS SERRA (Sw.) Kuntze. [*Polypodium serra* Sw.; *Tectaria incisa* Cav.; *Dryopteris serra incisa* Kuhn.] St. Thomas (according to Kuhn).

DRYOPTERIS MOLLIS (Jacq.) Hieron. [*Aspidium molle* Sw.] Forests, Signal Hill, St. Thomas; St. Jan; St. Croix (according to Millspaugh).

DRYOPTERIS TETRAGONA (Sw.) Urban. [*Polypodium tetragonum* Sw.] Forests, St. Thomas; St. Jan; St. Croix.

DRYOPTERIS POITEANA (Bory) Urban. [*Polypodium crenatum* Sw., not Forst; *Lastrea Poiteana* Bory.] St. Thomas and St. Croix (according to Eggers); St. Croix (according to West).

CYCLOPELTIS SEMICORDATA (Sw.) J. Smith. [*Polypodium semicordatum* Sw.; *Aspidium semicordatum* Sw.] Shaded localities, Virgin Islands (according to Eggers).

GYMNOPTERIS NICOTIANIFOLIA (Sw.) Presl. [*Acrostichum nicotianum* Sw.], attributed by Swartz to St. Thomas, was probably from Porto Rico.

NEPHROLEPIS EXALTATA (L.) Schott. [*Polypodium exaltatum* L.] Forests, St. Thomas; St. Croix. Cultivated on St. Croix (according to Millspaugh).

NEPHROLEPIS RIVULARIS (Vahl) Mett. [*Polypodium rivulare* Vahl.] St. Thomas (according to Kuhn).

NEPHROLEPIS BISERRATA (Sw.) Schott. [*Aspidium biserratum* Sw.; *Aspidium acutum* Schk.; *Nephrolepis acuta* Presl.; *Aspidium punctulatum* Sw.] Forests, St. Thomas (according to Eggers); St. Croix.

ODONTOSORIA ACULEATA (L.) J. Smith. [*Adiantum aculeatum* L.; *Davallia aculeata* J. E. Smith.] Pastures on high hills, St. Thomas.

ODONTOSORIA CLAVATA (L.) J. Smith, is doubtfully attributed to St. Thomas by Fée.

ASPLENIUM SERRATUM L. Forests, Signal Hill, St. Thomas.

ASPLENIUM PUMILUM Sw. Forests and wet banks, St. Thomas; St. Jan.

ASPLENIUM ABCISSUM Willd. [*A. firmum* Kunze.] St. Thomas (according to Grisebach).

BLECHNUM OCCIDENTALE L. Banks, fields and forests, St. Thomas; St. Jan; St. Croix.

PITYOGRAMMA SULPHUREA (Sw.) Maxon. [*Gymnogramme sulphurea* Desv.]. Cultivated in gardens.

PITYOGRAMMA CALOMELANA (L.) Link. [*Acrostichum calomelanos* L.; *Gymnogramme calomelanos* Kaulf.; *G. calomelanos pumila* Eggers.] Banks, hills, walls and thickets, St. Thomas; St. Jan; St. Croix.

HEMIONITIS PALMATA L. Forests, wet banks and rocky thickets, St. Thomas; St. Jan; St. Croix.

DORYOPTERIS PEDATA (L.) Fée. [*Pteris pedata* L.] Forests and shaded banks, St. Thomas; St. Jan.

CHEILANTHES MICROPHYLLA Sw. [*Adiantum microphyllum* Sw.] Rocky slopes, St. Thomas; St. Croix (according to West and to Eggers).

ADIANTUM VILLOSUM L. Forests, St. Thomas; St. Croix.

ADIANTUM LATIFOLIUM Lam. [*A. denticulatum* Sw.; *A. intermedium* of Eggers; *A. obliquum intermedium* of Millspaugh.] Shaded banks, hills of St. Thomas.

ADIANTUM CRISTATUM L. [? *A. microphyllum* of Eggers.] Hill-sides, St. Thomas.

ADIANTUM TENERUM Sw. Shaded banks and ravines on high hills, St. Thomas; St. Jan (according to Eggers); St. Croix.

ADIANTUM FRAGILE Sw. Thickets and walls, St. Thomas; St. Jan; St. Croix.

ADIANTUM FARLEYENSE Moore. Cultivated on St. Croix (*A. foliosum* of Millspaugh).

PYCNODORIA LONGIFOLIA (L.) Britton. [*Pteris longifolia* L.] Along rivulets in forests, St. Croix; in a water spout, St. Thomas.

PTERIS BIAURITA L. St. Thomas (according to Kuhn).

ANTROPHYUM LINEATUM (Sw.) Kaulf. [*Hemionitis lineata* Sw.] Forest, St. Peter, St. Thomas (according to Eggers).

PALTONIUM LANCEOLATUM (L.) Presl. [*Pteris lanceolata* L.; *Taenitis lanceolata* R. Br.; *Heteropteris lanceolata* Fée.] On rocks and trees in forests, St. Thomas; all islands (according to Eggers).

POLYPODIUM POLYPODIODES (L.) Hitchc. [*Acrostichum poly-podioides* L.; *P. incanum* Sw.] On trees, St. Thomas; St. Jan; St. Croix (according to Eggers).

PHLEBODIUM AUREUM (L.) J. Sm. [*Polypodium aureum* L.] On trees and rocks, St. Thomas; St. Jan; St. Croix.

PHLEBODIUM AREOLATUM (H. & B.) J. Sm. [*Polypodium areolatum* H. & B.] On trees, St. Thomas; St. Jan.

LEPICYSTIS PILOSELLOIDES (L.) Diels. [*Polypodium piloselloides* L.] In forests among rocks, Signal Hill, St. Thomas.

PHYMATODES EXIGUUM (Hew.) Underw. [*Polypodium exiguum* Hew.; *P. serpens* Sw., not Forst.; *P. Swartzii* Baker.] On trees, Bordeaux, St. Jan; St. Croix.

CAMPYLONEURUM PHYLLITIDIS (L.) Presl. [*Polypodium Phyllitidis* L.; *P. Phyllitidis repens* of Eggers.] On rocks and trees in forests, St. Thomas; St. Jan; St. Croix.

CAMPYLONEURUM LATUM Moore. Shaded rocks, Bethania, St. Jan.

ACROSTICHUM AUREUM L. [*Chrysodium vulgare* Fée.] Borders of marshes, St. Thomas; St. Croix.

#### OPHIOGLOSSACEAE

OPHIOGLOSSUM RETICULATUM L. Grassy places among rocks, Crown, St. Thomas; shaded bank, Bordeaux, St. Jan.

#### LYCOPODIACEAE\*

LYCOPODIUM CERNUUM L. Among rocks in higher hills, St. Thomas.

#### PSILOTACEAE

PSILOTUM NUDUM (L.) Griseb. [*Lycopodium nudum* L.; *P. triquetrum* Sw.] Shaded places among rocks, Signal Hill, St. Thomas; Bordeaux, St. Jan; Crequis, St. Croix.

#### BRYOPHYTA

##### MUSCI<sup>4</sup>

DICRANELLA LONGIROSTRIS (Schwaegr.) Mitten. [*Trematodon longirostris* Schwaegr.] St. Jan.

LEUCOLOMA SERRULATUM Bridel. [*L. Riedlei* Besch.] On trees in wet woods, St. Thomas.

OCTOBLEPHARUM ALBIDUM (L.) Hedw. [*Bryum albidum* L.] On roots of *Anthurium*, near Caret Bay, St. Thomas; St. Croix.

FISSIDENS KEGELIANUS C. Muell. [*F. palmatus*—of various authors, not Swartz.] On banks, St. Thomas; St. Jan; St. Croix.

FISSIDENS ELEGANS Bridel. On rocks and earth, St. Thomas; St. Jan.

SYRRHOPODON FLAVESCENS C. Muell. On rotten wood, St. Jan.

CALYMPERES RICHARDI C. Muell. [*C. Breutelii* Besch.; *C. hexagonum* Besch.] On rocks and banks, St. Thomas.

HYMENOSTOMUM BREUTELII (C. Muell.) Broth. [*Weisia Breutelii* C. Muell.; *Gymnostomum Breutelii* Br. & Sch.] On banks, St. Thomas; St. Jan; St. Croix.

HYOPHILA TORTULA (Schwaegr.) Hampe. [*Gymnostomum Tortula* Schwaegr.] St. Croix.

BARBULA AGRARIA (Sw.) Hedw. [*Bryum agrarium* Sw.] On rocks, walls and earth, St. Thomas; St. Jan; St. Croix.

BARBULA CRUEGERI Lond. [*Hyophila uliginosa* E. G. Britton.] Bethania, St. Jan.

PHASCUM SESSILE E. G. Britton. On the ground, Cowell Point and Water Island, St. Thomas.

<sup>4</sup> Contributed by Elizabeth G. Britton.

BRYUM CRUEGERI Hampe. Bed of stream, Tutu, St. Thomas. Sterile.

PHILONOTIS SPHAEROCARPA (Sw.) Bridel. [*Mnium sphaericarpum* Sw.] Moist banks, high hills of St. Thomas.

PHILONOTIS TENELLA (C. Muell.) Jaeger. [*Bartramia tenella* C. Muell.] Wet banks, St. Jan.

PIRELLA CYMBIFOLIA (Sull.) Cardot. [*Pilotrichum cymbifolium* Sull.] On trees near Bethania, St. Jan.

NECKERA DISTICHA (Sw.) Hedw. [*Fontinalis disticha* Sw.] On trees, rarely on rocks, St. Peter, St. Thomas.

NECKERA JAMAICENSIS (Gmel.) E. G. Britton. [*Hypnum jamaicense* Gmel.] On trees, Bethania, St. Jan.

CALLICOSTELLA BELANGERIANA (Besch.) Jaeger. [*Hookeria Belangeriana* Besch.] On stones, Bordeaux, St. Jan.

STEREOPHYLLUM LEUCOSTEGUM (Bridel) Mitten. [*Leskea leucostega* Bridel.] On wet or shaded rocks, St. Thomas; St. Jan.

MITTENTHAMNIUM DIMINUTIVUM (Hampe) E. G. Britton. [*Hypnum diminutivum* Hampe.] On old wood, Bordeaux, St. Jan.

TAXITHELIUM PLANUM (Bridel) Mitten. [*Hypnum planum* Bridel.] Wet rocks, logs and tree-roots, St. Thomas; St. Jan.

SEMATOPHYLLUM ADMISTUM (Sull.) Mitten. [*Hypnum admistum* Sull.] Shaded banks, stones and dead wood, St. Thomas; St. Jan.

HAPLOCLADIUM MICROPHYLLUM (Sw.) Broth. [*Hypnum microphyllum* Sw.] Shaded bank between Pearl and Bonne Resolution, St. Thomas.

THUIDIUM CYMBIFOLIUM (Dz. & Mk.) Br. Jav. Shaded banks, St. Thomas.

DENDROPOGON RUFESCENS Schimp., a Mexican species, has been credited to St. Thomas in Paris, Index, and accepted by Brotherus, but we have seen no specimens.

## HEPATICAE OF ST. CROIX, ST. JAN, ST. THOMAS AND TORTOLA<sup>5</sup>

In the Synopsis Hepaticarum of Gottsche, Lindenberg and Nees von Esenbeck, published in 1844-47, three species of Hepaticae are listed from St. Croix, one from St. Jan, and one from St. Thomas. Another species, although listed from St. Kitts, was based in all probability on material from St. Jan. A seventh species has been listed from St. Jan by Stephani. These seven species, which are the only ones so far reported from the islands under discussion, deserve a few words of comment.

<sup>5</sup> Contributed by Alexander W. Evans, Yale University.

The first species, *Radula pallens* (Sw.) Dumort., is said to have been found "in St. Crucis insula," the record being based on a specimen in the Weber herbarium. This specimen was originally referred to *Jungermannia complanata* L. (*Radula complanata* Dumort.) by Weber,<sup>6</sup> but the later determination is probably correct.

The second species, *Lejeunea Montagnei* Gottsche, was based on material from the Mascarene Islands and is now regarded as a species of *Euosmolejeunea*. A specimen from St. Croix is listed in the Synopsis but is very problematical and would probably now be referred to some other species. Since the specimen in question has not been available for study, and since no later references to it are to be found in the literature, its status must be left in doubt.

The third species, *Lejeunea bethanica* Gottsche, is based on material collected by Breutel and is said to have come from "prope Bethaniam in Insula St. Christopheri." Many years later Stephani,<sup>7</sup> on the basis of a specimen in the Lindenberg herbarium at Vienna, quoted the species from St. Jan, referring it to the subgenus *Cheilo-Lejeunea*. Still later he apparently changed his ideas regarding the habitat of the plant, citing it from St. Kitts and redescribing it under the name *Cheilolejeunea bethanica* Steph.<sup>8</sup> In studying the Lejeuneae in the Lindenberg herbarium, the writer found two specimens labeled *Lejeunea bethanica*, both of which were collected by Breutel at Bethania, St. Jan. One of these is very fragmentary but is apparently referable to *Rectolejeunea phyllobola* (Nees & Mont.) Evans; the other, which is the specimen studied by Stephani, is (in the writer's opinion) referable to *Lejeunea* rather than to *Cheilolejeunea*. The species was originally described from a specimen in the Gottsche herbarium at Berlin, not available at the present time, and there is therefore a possibility that the actual type may have come from St. Kitts. The evidence, however, is against this view, and it seems permissible to assume that the specimen in the Lindenberg herbarium is identical with the type and that it formed a part of the same collection. Unfortunately *L. bethanica* has not again been collected on either St. Jan or St. Kitts.

The fourth species, *Lejeunea epiphyta* Gottsche, was described as "parasitans in *Lej. bethanica* in Insula St. Johannis prope Bethaniam (Breutel, Hb. G.)." This statement affords further proof that *L. bethanica* came from St. Jan. According to Stephani<sup>9</sup> the specimen of *L. epiphyta* in the Lindenberg herbarium should be referred to

<sup>6</sup> Prodr. Hist. Musc. Hepat. 59. 1815.

<sup>7</sup> Hedwigia 29: 86. 1890.

<sup>8</sup> Sp. Hepat. 5: 652. 1914.

<sup>9</sup> Hedwigia 29: 90. 1890.

*Lejeunea myriocarpa* Nees & Mont., now *Cololejeunea myriocarpa* Evans.

The fifth species, *Anthoceros Breutelii* Gottsche, was said to have been collected near Friedensthal, St. Croix. This species, in 1858, was transferred by its author<sup>10</sup> to the genus *Notothylas*, where it is still retained. The following year Milde<sup>11</sup> showed that the type material of the species did not come from St. Croix but from the Corallberg, St. Jan. There is likewise a specimen from St. Jan in the Mitten herbarium, which is presumably a part of the original collection.

The sixth species, *Lejeunea linguaefolia* Tayl., was found "in Insula St. Thomas (Richard in Hb. Hk. a. 1814)." A specimen of this species in the Lindenberg herbarium is referred by Stephani<sup>12</sup> to *Brachiolejeunea corticalis* (Lehm. & Lindenb.) Schiffn., and the writer would make the same disposition of a specimen in the Mitten herbarium.<sup>13</sup> Recently, however, Stephani has apparently thrown doubt on the propriety of this reduction. In the fifth volume of his *Species Hepaticarum* (1912), on page 35, he includes *L. linguaefolia* among the species of *Ptychocoleus*, citing it as *Pt. linguaefolius* Steph., and adds that he has been unable to see the plant and that his diagnosis is simply a translation of the original description. On page 127, nevertheless, he again quotes *L. linguaefolia* among the synonyms of *B. corticalis*. Since Stephani's original reduction was based on the study of an actual specimen, the writer would regard *Pt. linguaefolius* as nothing more than an unnecessary synonym.

The seventh and last species, *Riccia Breutelii* Hampe, is described as new by Stephani in the first volume of his *Species Hepaticarum* (1898), on page 17, the habitat being given as "Insulae S'Kitts et S. Juan." Dr. Howe informs the writer that there is some question about the identity of the St. Kitts and St. Jan plants and it is therefore omitted from the following list, pending investigation of authentic material.

In February, 1913, a botanical exploration of the islands was carried on under the auspices of the New York Botanical Garden, the Carnegie Institution of Washington and the United States National Museum.<sup>14</sup> The Hepaticae collected by the various members of this expedition form the basis for the present report. The specimens from St. Thomas, unless otherwise noted, were collected by Mrs. Elizabeth G. Britton and Miss Delia W. Marble, those from St. Jan

<sup>10</sup> Bot. Zeit. 16 (Anhang): 21. 1858.

<sup>11</sup> Bot. Zeit. 17: 50. 1859.

<sup>12</sup> Hedwigia 29: 22. 1890.

<sup>13</sup> See Bull. Torrey Club 35: 164. 1908.

<sup>14</sup> See Britton, N. L., Jour. N. Y. Bot. Gard. 14: 99. 1913.

and Tortola by N. L. Britton and J. A. Shafer, and those from St. Croix by J. N. Rose. The report records also two specimens collected by C. H. Ostenfeld in 1914, one on St. Thomas and one on St. Jan.

1. *RICCIA BRITTONII* M. A. Howe.<sup>15</sup>

ST. THOMAS: on the ground, Water Island, *N. L. Britton, E. G. Britton & J. A. Shafer 148* (a much larger plant than the original).

2. *PLAGIOCHILA LUDOVICIANA* Sulliv.

ST. JAN: on wet rocks, Bethania, 360. ST. THOMAS: on rocks, St. Peter, 1453.

3. *RADULA PALLENS* (Sw.) Dumort.

ST. CROIX: without definite locality, collector unknown, cited in the Synopsis Hepaticarum.

4. *COLOLEJEUNEA MYRIOCARPA* (Nees & Mont.) Evans.

*Lejeunea epiphyta* Gottsche.

ST. CROIX: without definite locality. ST. JAN: near Bethania, *J. C. Breutel*. ST. THOMAS: on rotten wood, near Magin's Bay, 1317. TORTOLA: on a rock, Road Town to High Bush, 325 m. alt., 786 (a trace only).

5. *LEJEUNEA BETHANICA* Gottsche.

*Cheilolejeunea bethanica* Steph.

ST. JAN: near Bethania, *J. C. Breutel*.

6. *LEJEUNEA GLAUDESCENS* Gottsche.

ST. THOMAS: on tree roots, Bonne Resolution, 441.

7. *LEJEUNEA MINUTILOBA* Evans.

ST. THOMAS: St. Peter, 1251, 1254, 1255; on stones, Crown, 1365 (type).

8. *LEJEUNEA PILILOBA* Spruce.

ST. CROIX: on bark of a tree, without definite locality. ST. JAN: at base of a tree, Rosenberg, 300 m. alt., 306; on a shaded rock, Bordeaux, 350 m. alt., 571. ST. THOMAS: on ridge north of Charlotte Amalia, 406; Crown, 1365 (a trace only); on rotten wood, St. Peter, 1451.

9. *MICROLEJEUNEA LAETEVIRENS* (Nees & Mont.) Evans.

ST. THOMAS: on *Anthurium* roots, Pearl to Bonne Resolution, 1340; on fern roots, St. Peter, 1253; on mountain behind Charlotte Amalia, *C. H. Ostenfeld 77*. TORTOLA: on a rock, Roadtown to High Bush, 325 m. alt., 786 (in part).

10. *RECTOLEJEUNEA PHYLLOBOLA* (Nees & Mont.) Evans.

ST. JAN: near Bethania, *J. C. Breutel* (specimen in the Lindenberg

<sup>15</sup> Determined by Marshall A. Howe.

herbarium, labeled *L. bethanica*); on *Clusia* roots, Bethania, 355. ST. THOMAS: on roots of royal palm, Tutu, 423. TORTOLA: on a rock, Roadtown to High Bush, 325 m. alt., 786 (in part); shaded rocks, High Bush, 375 m. alt., 815.

11. EUOSMOLEJEUNEA CLAUSA (Nees & Mont.) Evans.

ST. THOMAS: shaded bank, Pearl to Bonne Resolution, 1339; on the ground, St. Peter, 1455.

12. EUOSMOLEJEUNEA DURIUSCULA (Nees) Evans.

ST. JAN: shaded rocks, Bordeaux, 330 m. alt., 570. ST. THOMAS: on rocks, St. Peter, 1452; on rocks, Crown, 1454.

13. EUOSMOLEJEUNEA TRIFARIA (Nees) Schiffn.

ST. THOMAS: on rocks, St. Peter, 1252; on a rotten log, Crown, 450 m. alt., 1367.

14. TAXILEJEUNEA OBTUSANGULA (Spruce) Evans.

ST. JAN: on a stone, Bordeaux, 400 m. alt., 582.

15. MASTIGOLEJEUNEA AURICULATA (Wils. & Hook.) Schiffn.

ST. JAN: on a tree, Bethania to Rosenberg, 243; on a wet rock, Bethania 356, 362; on loose blocks, Little Cruz Bay, C. H. Ostenfeld 391. ST. THOMAS: on a rock, St. Peter, 1256; on rocks in ravine below Tutu, 1290.

16. BRACHIOLEJEUNEA CORTICALIS (Lehm. & Lindenb.) Schiffn.

*Lejeunea linguaefolia* Tayl.

*Ptychocoleus linguaefolius* Steph.

ST. THOMAS: without definite locality, L. C. Richard.

17. FRULLANIA BRASILIENSIS Raddi.

ST. JAN: on wet rocks. Bethania, 363 (mostly, specimens without perianths and therefore somewhat doubtful).

18. FRULLANIA KUNZEI Lehm. & Lindenb.

ST. JAN: on wet rocks, Bethania, 363 (a trace only); on rocks, Bordeaux, 300 m. alt., 550.

19. FRULLANIA SQUARROSA (R. Bl. & N.) Dumort.

ST. THOMAS: on rocks, ridge north of Charlotte Amalia, 407; on rocks, Bonne Resolution, 440; on rocks, Magin's Bay to Mafolie, 1313; on rocks, Pearl to Bonne Resolution, 1338; on a stone wall, Crown, 450 m. alt., 1364.

20. NOTOTHYLAS BREUTELII Gottsche.

*Anthoceros Breutelii* Gottsche.

ST. JAN: Corallberg, J. C. Breutel (type); without definite locality or collector's name (specimen in Mitten herbarium); Bordeaux, 528. ST. THOMAS: on damp earth, Nisky, N. L. Britton, E. G. Britton &



*D. W. Marble* 76; hills north of Charlotte Amalia, 409; on the ground, Magin's Bay to Mafolie, 1312.

21. ANTHOCEROS PUNCTATUS L.

ST. THOMAS: in a mud hole, Crown, 450 m. alt., 1363.

REPORT ON THE LICHENS OF ST. THOMAS AND  
ST. JAN<sup>16</sup>

The following report is based primarily upon a study of 90 numbers of lichens from St. Thomas and St. Jan Islands; from St. Thomas, 82 numbers collected by Dr. N. L. Britton, Mrs. E. G. Britton, and Miss Delia W. Marble, unless otherwise stated; from St. John, 8 numbers collected by Dr. N. L. Britton and Dr. J. A. Shafer. To these have been added a few species recorded by Nylander in *Flora* (63: 127. 1880) and two endemic species described by Mueller-Argau. Altogether, we have represented 30 genera with 69 species and varieties, of which three species and one variety are here described as new. The discussion of the characteristics of the lichen-flora will be confined to that of St. Thomas.

There is no peculiar element in the lichen-flora of St. Thomas comparable with the gelatinous rock-lichens of Mona Island (see *Annals Missouri Bot. Gard.* 2: 35. 1915), or with the crustose and gelatinous rock-lichens of Bermuda (see *Bull. Torrey Bot. Club* 43: 146-155. 1916). Such rock-lichens as occur on St. Thomas belong to widely distributed groups even where the actual species are more restricted in distribution. In fact the greater part of the lichen-flora is made up of species more or less common throughout the West Indies or even in the tropics of both hemispheres. It is probably safe to say that there are not more than half a dozen endemic species in St. Thomas. Of the three new species described in this paper, two occur elsewhere in the West Indies. The flora is comparatively rich in the variety of crustose bark-lichens, especially in the genera *Anthracothecium* with 5 species, *Arthonia* with 8 species, and *Opegrapha* with 5 species. It is rather surprising that only one *Graphis* and no *Trypethelium* should have been collected. On the whole the lichen-flora is rather commonplace. In the following list, stations outside of the Virgin Islands are noted for species, the range of which is limited or not well known.

LICHENS OF ST. THOMAS

1. DERMATOCARPON HEPATICUM (Ach.) Th. Fr. On soil, without definite locality, 151.

<sup>16</sup> Contributed by Lincoln W. Riddle, Wellesley College.

2. LEPTORAPHIS EPIDERMIDIS (Ach.) Th. Fr. On bark, Bordeaux, 1381.
3. PORINA DESQUAMESCENS Fée. Without data, 1288a.
4. PORINA NUCULA Ach. On *Erythrina*, St. Peter, 1444b, 1445.
5. PYRENULA LEUCOPLACA (Wallr.) Koerb. On bark, Smith's Bay, 1276a.
6. ANTHRACOTHECIUM BREUTELII Muell. Arg. Flora 68: 339. 1885.  
On bark, without definite locality, collected by Breutel. Endemic.
7. ANTHRACOTHECIUM CANELLAE-ALBAE (Fée) Muell. Arg. On *Cephalocereus*, Smith's Bay, 1274a; on twigs of *Guettarda*, Crown, 450 m. altit., 1357. South America.
8. ANTHRACOTHECIUM LIBRICOLUM (Fée) Muell. Arg. On *Melicocca*, Tutu, 468a; on same, Smith's Bay, 1276, 1282; on *Erythrina*, St. Peter, 1444.
9. ANTHRACOTHECIUM OCHRACEOFLAVUM (Nyl.) Muell. Arg.  
On bark of coconut palm, near Charlotte Amalia, 489; on *Trichilia*, Tutu, 467.
10. ANTHRACOTHECIUM PYRENULOIDES (Mont.) Muell. Arg. On bark, without definite locality, collected by Dr. Forel. Recorded by Nylander in Flora 63: 127. 1880.
11. MELANOTHECA FOVEOLATA Muell. Arg. On bark, near Tutu, 1287. Cuba.
12. PARATHELIUM INDUTUM Nyl. On *Cephalocereus*, Smith's Bay, 1274; on bark, Bordeaux, 1382 in part. Porto Rico, Colombia.
13. PARMENTARIA ASTROIDEA Fée. On bark, Bordeaux, 1382 in part.
14. ARTHONIA ANEGADENSIS Riddle Mem. New York Bot. Gard. 6: 579. 1916. On *Bontia*, Smith's Bay, 1286. Anegada.
15. ARTHONIA CONFERTA (Fée) Nyl. On *Plumeria*, Tutu, 1484.
16. ARTHONIA GREGARIA (Weig.) Koerb. On bark, Bordeaux, 1380.
17. ARTHONIA OCHRACEELLA Nyl. On bark of old fallen branch, Crown, 450 m. altit., 1362. Cuba.
18. ARTHONIA RUBELLA (Fée) Nyl. On *Melicocca*, Tutu, 468b.
19. ARTHONIA SUBRUBELLA Nyl. Collected by Dr. Forel. Recorded by Nylander in Flora 63: 127. 1880.
20. ARTHONIA.<sup>17</sup> On *Guilandina*, Smith's Bay, 1281 p.p.
21. ARTHONIA. On *Plumeria*, Tutu, 463.
22. ARTHOTHELIUM MACROTHERCUM (Fée) Mass. On mango, St. Peter, 1247.
23. **Opegrapha acicularis Riddle sp. nov.**  
Thallus epiphloeodes crustaceus effusus determinatus nigrolimitatus, albidus

<sup>17</sup> There are included in this paper three species of *Arthonia* the determination of which it has not been possible to complete in the time at my disposal. L. W. R.

vel albo-cinereascens, tenuis laevis subcontinuus. Apothecia sessilia nuda ad 0.8 mm. lata, primum orbicularia suburceolata, margine crenato, dein orbicularia oblonga vel subdifformia, disco late aperto plano rugoso atrofusco, margine laciniato partim stellato-radiato nitido nigro; epithecio fusco; hymenio incolore, 120-130  $\mu$  altit.; hypothecio incolore; amphithecio sub lamina deficiente, cetero crasso nigro. Paraphyses firmae crassae ramosae haud connexae. Asci cylindricae, 8-spore. Spores incolores aciculares rectae vel subflexuosae vel rarius contortae, 20-24-loculares, cellulis cylindricis, 60-100 x 2-3  $\mu$ .

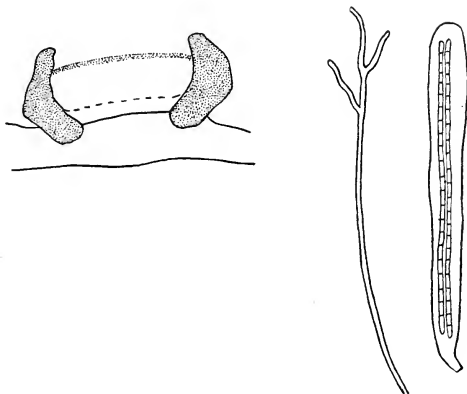


FIG. 1. *Opegrapha acicularis* Riddle. Vertical section of apothecium (stippling indicates dark coloration); paraphysis; ascus with two of the eight spores.

On bark of *Erythroxylon*, Punta Aguila, Porto Rico, collected by N. L. Britton, J. F. Cowell, and Stewardson Brown, Feb. 27, 1915, no. 4682 (type!). Also, on *Guilandina*, Smith's Bay, St. Thomas, 1276a, 1279; and on *Coccolobis*, Great Harbor Cay, Berry Islands, Bahamas, N. L. Britton and C. F. Millspaugh, no. 2545.

This is a striking and distinct species belonging to the section *Pleurothecium* of the genus *Opegrapha*. Externally it is easily recognizable by the marked tendency for the lacinate margin of the apothecia to spread out in a stellate manner. The spores resemble those of *Lecanactis myriadea* (Fée) Zahlbr. and of *Opegrapha pleistophragmoides* Nyl. But both of the species named have the black amphithecium complete at the base, and the spores are almost twice as thick.

24. OPEGRAPHA AGELAEA Fée. On *Crescentia*, Tutu, 462. Cuba, Colombia.
25. OPEGRAPHA ATRA Pers. On *Guilandina*, Smith's Bay, 1278a; on *Melicocca*, Smith's Bay, 1285.

26. OPEGRAPHA BONPLANDI Fée. On *Melicocca*, Magen's Bay, 1310; on bark, Mariendahl Road, 1476.
27. OPEGRAPHA VULGATA Ach. On *Melicocca*, Tutu, 468.
28. GRAPHIS SCRIPTA (L.) Ach. On bark, Smith's Bay, 1277.
29. PHAEOGRAPHIS INUSTA (Ach.) Muell. Arg. On *Acacia*, near Charlotte Amalia, 486; on *Guilandina*, Smith's Bay, 1278; without locality, 464.
30. CHIODECTON (Sect. Enterographa) sp. On *Erythrina*, St. Peter, 1445a.
31. GYROSTOMUM SCYPHULIFERUM (Ach.) Fr. On *Plumeria*, Tutu, 465; on *Acacia*, near Charlotte Amalia, 487, 494.
32. BILIMBIA CUPREA Massal. in Lotos (1856) 77.  
*Lecidea cupreorosella* Nyl. Mem. Soc. Sci. Nat. Cherb. 5: 122. 1857.  
*Biatora cupreorosella* Tuck. Syn. N. A. Lich. 2: 34. 1888.  
On old brick, St. Peter, 1442. Eastern United States, Europe.
33. BACIDIA ALBESCENS (Arn.) Zwackn. On *Erythrina*, St. Peter, 1445b.
34. CLADONIA PITYREA f. SQUAMULIFERA Wainio. On rocks, slope of Crown, 1440.
35. LEPTOGIUM CHLOROMELUM (Sw.) Nyl. On bark, Cowell Point, 103, 172; on *Pisonia* roots, Water Island, 153.
36. LEPTOGIUM TREMELLOIDES (L. f.) S. F. Gray. On tree-trunk, Crown, 1361.
37. LEPTOGIUM TREMELLOIDES var. CAESIUM (Ach.) Hue. On rock near Bonne Resolution, 447.
38. LECANORA CINEREOCARNEA (Eschw.) Wainio. Without data, 23a; on *Guilandina*, Smith's Bay, 1281.
39. LECANORA GRANIFERA Ach. On bark, Mariendahl Road, 1476a.
40. **Lecania euthallina** Riddle **sp. nov.**

Thallus crustaceus uniformis effusus crassus rimoso-areolatus, areolis 0.2-0.4 mm. latis leviter convexis contiguis, cinereus vel sat pallide fuscescens; hypothallo nullo. Conidia cystococcoidea. Apothecia 0.6 mm. (0.4-1.0 mm.) lata, numerosa partim caespitosa superficialia sat elevata regularia, disco concavo castaneo vel fusco-nigricante nudo, margine proprio tenue disco concolore, margine thallico integro vel demum crenulato crasso prominente thallo concolore; epithecio fulvo; hymenio et hypothecio incolore. Asci 8-spori. Sporae incolores oblongae biloculares haud placodiomorphae, 10-12 x 4-5  $\mu$ .

On rock, Tutu, St. Thomas, collected by Dr. N. L. Britton, Mrs. E. G. Britton, and Miss Delia W. Marble, Feb. 8-9, 1913, no. 469 (type!).

*Lecania euthallina* differs from *L. erysibe* (Ach.) Th. Fr. in the much better developed thallus (whence the specific name), it being compact,

thicker, and more continuous. Furthermore, the apothecia are more concave, with the persistent thalline margin more conspicuous.

41. *PARMELIA CETRATA* f. *SUBSIDIOSA* Muell. Arg. On tree-trunk, Crown, 1441 in part. North Carolina, Florida, Cuba, Jamaica.
42. *PARMELIA CONSPERSA* (Ehrh.) Ach. On rocks, Crown, 450 m. altit., 1358.
43. *PARMELIA LATISSIMA* var. *CRISTIFERA* (Taylor) Hue. On tree-trunk, St. Peter, 1249; on twig, Crown, 1441 in part.
44. *PARMELIA PERLATA* (L.) Ach. On rocks, near Bonne Resolution, 446; on *Spondias*, Mandal, 1311.
45. *RAMALINA COMPLANATA* (Sw.) Ach. Without data, 1356a.
46. *RAMALINA GRACILIS* (Pers.) Nyl. On twigs of *Guettarda*, Crown, 450 m. altit., 1356.
47. ***Blastenia nigrocincta* Riddle sp. nov.**

Thallus crustaceus arcte adnatus sat crassus, ambitu subradiato-laciniatus effiguratusque, centro rimoso-areolatus, areolis 0.4-0.8 mm. latis leviter convexa primum contiguus demum hypothallo nigro dispersis, cinereo-albescens dein fumosus aut partim luridus. Apothecia 0.3-0.5 mm. lata, superficialia dispersa vel partim caespitosa nuda, disco plano vel leviter convexa ferrugineo-aurantiaco, margine proprio sat tenue persistente nigro nitido, margine thallino nullo; excipulo externe coerulesco-nigro interne incolore; epithecio ferrugineo; hymenio incolore; hypothecio pallide fuscescente. Asci 8-spори. Sporae incolores ellipsoideae biloculares placodiomorphae, loculis poro tenue confluentibus, 12-14 x 5-6  $\mu$ .

On rock, Tutu, St. Thomas, collected by Mrs. E. G. Britton and Miss Delia W. Marble, Feb. 8-9, 1913, no. 469a (**type!**). Also, on limestone, Montalva, Porto Rico, N. L. Britton, J. F. Cowell, and Stewardson Brown, March 2-4, 1915, no. 4810.

This species is distinct in the contrasting coloration of the black margin and the orange disk of the apothecia, a character which will serve to distinguish it on the one hand from species with similar thalline characters, such as *Bl. Forstroemiana* (Fr.) Muell. Arg.; and on the other hand from *Bl. ferruginea* (Huds.) Koerb., where the disk and margin are concolorous, and from *Blastenia peragrata* (Fée) Muell. Arg., where the margin is black, but the disk is aeruginous-brown.

48. ***Caloplaca diplacia* (Ach.) Riddle comb. nov.**

*Lecanora* Ach. Synop. Lich. 154. 1814.

On rock, near Charlotte Amalia, 493, 495, 1485 in part. Also recorded by Nylander in Flora 63: 127. 1880. Apparently confined to the West Indies.

- 49.\* *CALOPLACA MURORUM* (Hoffm.) Th. Fr. On rock, near Charlotte Amalia, 1485 in part.

50. **Caloplaca subsequestra** (Nyl.) Riddle **comb. nov.**  
*Lecanora* Nyl. Flora **63**: 127. 1880.  
 On rocks, without definite locality, collected by Dr. Forel. Endemic.
51. **BUELLIA DISCOLOR** (Hepp) Koerb. On rock, Tutu, 469b; without definite locality, collected by Dr. Forel, according to Nylander (l. c.). Europe.
52. **BUELLIA PARASEMA** var. **AERUGINESCENS** (Nyl.) Muell. Arg. On coconut near Charlotte Amalia, 489a.
53. **Buellia prospersa** (Nyl.) Riddle **comb. nov.**  
*Lecidia* Nyl. Flora **63**: 127. 1880.  
 On rocks, without definite locality, collected by Dr. Forel. Endemic.
54. **PYXINE COCOES** (Sw.) Nyl. On bark, near Bonne Resolution, 445; on *Melicocca*, Tutu, 466.
55. **PYXINE COCOES** var. **ENDOXANTHA** Muell. Arg. On *Guilandina*, Smith's Bay, 1280; on bark, Mariendahl Road, 1475.
56. **PYXINE MEISSNERI** Tuck. On coconut palm, without definite locality, collected by Dr. J. N. Rose, 3198.
57. **PHYSICIA ALBA** (Fée) Muell. Arg. On *Erythrina*, St. Peter, 1443.
58. **PHYSICIA CAESIA** (Hoffm.) Nyl. On rocks, without definite locality, collected by Dr. Forel. Recorded by Nyl. Flora **63**: 127. 1880.
59. **PHYSICIA CRISPA** (Pers.) Nyl. On *Elaphrium*, near Charlotte Amalia, 491; on roots, same locality, 492, 496; on *Melicocca*, Tutu, 461.
60. **PHYSICIA EROSULA** Nyl. Flora **63**: 127. 1880. Based on material growing on rocks, St. Thomas, without definite locality, collected by Dr. Forel. Doubtfully distinct from the widely distributed *Physcia tribacia* (Ach.) Tuck.
61. **PHYSICIA PICTA** (Sw.) Nyl. On rock, St. Peter, 1260; on coconut palm, collected by Dr. J. N. Rose, 3197.
62. **PHYSICIA SPECIOSA** (Wulf.) Nyl. On rocks, near Charlotte Amalia, 405; on bark, St. Peter, 1248, 1250.

#### LICHENS OF ST. JAN

1. **PYRENULA MAMILLANA** (Ach.) Trev. On bark of *Icacorea*, Bordeaux, 597.
2. **MELANOTHECA ACHARIANA** Fée. On *Inga*, Bordeaux, 598. Cuba, Venezuela.
3. **MYCOPORELLUM ELLIPTICUM** Muell. Arg. Flora **72**: 508. 1889. On bark, without definite locality, collected by Levier, no. 113. Endemic.

4. ARTHONIA. On bark, Bordeaux, 577.
  5. ARTHOTHELIUM MACROTHECUM (Fée) Mass. On *Icacorea*, Bordeaux, 540.
  6. **Graphina nitidescens** (Nyl.) Riddle **comb. nov.**  
*Fissurina* Nyl. Lich. Japon. 108. 1890.  
 On *Nectandra*, Bordeaux, 581. Florida, Cuba, Porto Rico.
  7. OPEGRAPHA VULGATA Ach. On *Maytenus*, Little St. James Island,  
 N. L. Britton & J. N. Rose, 1405.
  8. **Leptogium marginellum** var. **isidiosellum** Riddle **var. nov.**  
 Thallus isidiis tenuibus dense tectus; ceterus ut in forma typica apothecia  
 nulla.  
 On wet rock, road to Rosenberg, N. L. Britton & J. A. Shafer,  
 Feb. 5-7, 1913, no. 276 (**type!**).
- The fringed apothecia being such a characteristic feature of *Leptogium marginellum*, it is only after some hesitation that this material has been placed here. The texture and the wrinkling of the thallus is in exact agreement, however, with typical specimens. And the relation of this variety to the species is strictly comparable with the conditions in *L. tremelloides*, abundantly fruiting in the tropics, and its variety *caesium*, with isidia but very rarely fruiting; and with *L. phyllocarpum* and its variety *isidiosellum*.
9. PARMELIA TINCTORUM Despr. On tree-trunk, Bordeaux, 567.

The following lichens are recorded in "Le Végétation des Antilles Danoises" by F. Børgesen & Ove Paulsen in *Revue Générale de Botanique* 12: 507, 508. 1900.

STICTA WEIGELII (Ach.) Wainio. St. Croix; St. Thomas.

GRAPHIS SCRIPTA (L.) Ach. St. Croix.

LECIDEA BUELLIANA Muell. Arg. St. Croix.

PERTUSARIA WULFENII (DC.) Fr. St. Croix.

PARMELIA PERLATA (L.) Ach. St. Thomas; St. Jan.

PARMELIA TINCTORUM Despr. [*P. coralloides* Mey. et Flot.] St. Croix.

PHYSICIA INTEGRATA Nyl. St. Jan.

RINODINA sp. St. Croix.

VERRUCARIA sp. St. Croix.

ARTHONIA RADIATA (Pers.) Ach. St. Croix.

SCHIZOXYLON sp. St. Thomas.

#### FUNGI

During our exploration of St. Thomas and St. Jan in 1913, about 25 species of fungi were obtained, and Dr. Rose collected four others on St. Croix; manuscript record has been made of these.

Twenty species collected by Mr. Ricksecker on St. Croix are

listed by Dr. Millspaugh in his "Flora of the Island of St. Croix," as determined by J. B. Ellis and F. D. Kelsey.<sup>18</sup>

Thirty-one species brought by various collectors to Copenhagen, determined by E. Rostrop, are recorded by Børgesen and Paulsen in their "Végétation des Antilles Danoises."

Seven species, collected on St. Thomas during the voyage of the "Challenger," are listed by M. J. Berkeley in Journal of the Linnean Society **14**: 352.

These records duplicate each other considerably, indicating a known fungus flora of somewhat over fifty species only. Inasmuch as there must be several hundred species on the islands, a list of fungi is deferred for further mycological field work.

#### ALGAE<sup>19</sup>

"The Marine Algae of the Danish West Indies" is the title of a work, now appearing in parts, in which Dr. F. Børgesen, of Copenhagen, is carefully describing and adequately illustrating the seaweeds of these islands. His adoption of the English language in this work makes it immediately serviceable to American students. Volume **1**, including the Chlorophyceae (Green Algae) and Phaeophyceae (Brown Algae), was published in 1913 and 1914, and, at the date of writing, the first 240 pages of Volume 2, dealing with the Rhodophyceae (Red Algae) have appeared. Other papers of importance, dealing with the algae of the Danish West Indies, are the following:

- Borgesen, F.** A Contribution to the Knowledge of the Marine Alga Vegetation on the Coasts of the Danish West Indian Islands. Bot. Tidssk. **23**: 49-57. Figs. 1-4. 1900.
- Et Bidrag til Kundskaben om Algevegetationen ved Kysterne af Dansk Vestindien. Bot. Tidssk. **23**: 58-60. 1900. [An abstract, in Danish, of the foregoing article.]
- Contributions à la connaissance du genre *Siphonocladus* Schmitz. Overs. K. Danske Vidensk. Selsk. Forh. **1905**: 259-291. Figs. 1-13. 1905.
- An Ecological and Systematic Account of the Caulerapas of the Danish West Indies. K. Danske Vidensk. Selsk. Skr. VII. **4**: 337-392. Figs. 1-31. 1907.
- The Dasycladaceae of the Danish West Indies. Bot. Tidsskr. **28**: 271-283. Figs. 1-9. 22 My 1908.
- The Species of *Avrainvillea* Hitherto Found on the Shores of the Danish West Indies. Vidensk. Medd. Naturh. Foren. København **1908**: 27-44. pl. 33. Je 1908.
- Some New or Little-known West Indian Florideae. Bot. Tidssk. **30**: 1-19. pls. 1, 2, Figs. 1-11. 23 O 1909; II. Bot. Tidssk. **30**: 177-207. Figs. 1-20. 9 D 1910.
- Some Chlorophyceae from the Danish West Indies. Bot. Tidssk. **31**: 127-152. Figs. 1-13. 1911; II. Bot. Tidssk. **32**: 241-273. Figs. 1-17. 1912.

<sup>18</sup> The new species were described in Bull. Torr. Club **24**: 207-209. 1897.

<sup>19</sup> Contributed by Dr. Marshall A. Howe.



- The Algal Vegetation of the Lagoons in the Danish West Indies. Biol. Arbejd. tilegn. Eug. Warming. 41-45. Figs. 1-9. 1911.
- Two Crustaceous Brown Algae from the Danish West Indies. Nuova Notarisia 23: 123-129. Figs. 1-3. 1912.
- The Species of *Sargassum* Found along the Coasts of the Danish West Indies, with Remarks upon the Floating Forms of the Sargasso Sea. 1-20. Figs. 1-8. 1914. [No. 32 of a Mindeskrift for Japetus Steenstrup.]
- Cleve, Peter Theodor.** Diatoms from the West Indian Archipelago. [Virgin Islands and St. Bartholomew.] Bih. Svens. Vet. Akad. Handl. 5<sup>8</sup>: 1-22 pl. 1-5. 1878. Annot. list.
- Dickie, George.** Marine Algae Collected at St. Thomas during the Expedition of H. M. S. "Challenger." Jour. Linn. Soc. Bot. 14: 312-313. 17 O 1874. List.
- Millsbaugh, C. F.** Flora of the Island of St. Croix. Field Col. Mus. Bot. 1: 441-546. 1902. On pp. 467, 468 is a list of 17 species of marine algae, determined by Professor W. G. Furlow.
- Vahl, M.** Endeel Kryptogamiske Planter fra St. Croix. Skrivt. Naturh. Selsk. 5<sup>2</sup>: 29-47. 1802.

### ENDEMIC SPECIES

The approximate number of species native to the islands as recorded, excluding fungi and algae, is 1,052, as follows:

Spermatophyta .....	890
Pteridophyta .....	41
Bryophyta .....	46
Lichenes .....	75
	<u>1,052</u>

The numbers of Spermatophyta and Pteridophyta are not likely to be increased by further exploration, but there are probably some more Bryophyta and many more lichens to be obtained. As we know the flora at the present time, the following 27 species are endemic, at least to the Virgin Island group as a whole.

- Valota Eggersii* (Hack.) Hitchc. & Chase  
*Agave Eggersiana* Trelease  
*Peperomia myrtifolia* (Vahl) A. Dietr.  
*Pilea Richardi* Urban  
*Coccolobis Klotzchiana* Meissn.  
*Zanthoxylum thomasianum* Krug & Urban  
*Galactia Eggersii* Urban  
*Malpighia pallens* Small  
*Malpighia infestissima* (Juss.) Rich.  
*Maytenus cymosa* Krug & Urban  
*Reynosia Guama* Urban  
*Sida Eggersii* E. G. Baker  
*Psidium amplexicaule* Pers.  
*Calypttranthes thomasiana* Berg.

*Eugenia sessiliflora* Vahl  
*Chrysophyllum Eggersii* Pierre  
*Forestiera Eggersiana* Krug & Urban  
*Salvia thomasiana* Urban  
*Physalis Eggersii* O. E. Schulz  
*Solanum conocarpum* L. C. Rich.  
*Wedelia cruciana* L. C. Rich.  
*Phascum sessile* E. G. Britton  
*Anthracothecium Breutelii* Muell. Arg.  
*Lecania euthallina* Riddle  
*Caloplaca subsequestra* (Nyl.) Riddle  
*Buellia prospersa* (Nyl.) Riddle  
*Mycoporellum ellipticum* Muell. Arg.

The endemic elements are, then, only about 2.6 percent. of the native flora. A few other species are almost endemic, being otherwise known only on Porto Rico or on some other neighboring island. There are a few endemic species known on Tortola, and one on Anagada, but if the native species of these two islands, additional to those of St. Thomas, St. Jan and St. Croix, were taken into account, the percentage of endemism would not be increased.

Porto Rico, with a very much greater area and much higher mountains, has about 13 percent of its species of Spermatophyta and Pteridophyta endemic.







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