

**PROCEEDINGS
OF THE
THIRD SYMPOSIUM
ON THE
BOTANY OF THE BAHAMAS**

**Edited by
Robert R. Smith**

**Conference Organizer
Donald T. Gerace**

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AN ILLUSTRATED GUIDE TO THE COMMON PLANTS OF SAN SALVADOR ISLAND, BAHAMAS

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INTRODUCTION

This guide has grown out of a need to help non-science students and non-botanists to appreciate and learn about some of the plants that they encounter while studying on San Salvador. In 1984, Dr. Gerace, the Director of the Bahamian Field Station, suggested to L. Kass that an illustrated guide to some of the more common local flora, with the descriptions written in English, would be useful to all students and instructors at the field station. Such a guide should be particularly useful to students who do not have a botanical background and are unfamiliar with scientific terminology. L. Kass and her colleagues in the Division of Mathematics and Natural Science at Elmira College, who teach a course in Marine and Island Ecology on San Salvador, for non-biology majors, believed that there was a need for such a guide. During the summer of 1984, A. Kowalski, then a senior at Elmira College, became involved with illustrating the field guide.

It was resolved that the guide would be written by "translating" the usual descriptions of plants into common English. Detailed lined drawings would be prepared of the most common plants of San Salvador. These drawings would depict plant parts (flowers, fruits, leaves) that are the most helpful to the identification of that particular species. Key identifying characteristics such as flower color, habit, leaf and stem structure, and unique structures would be emphasized in the drawings and/or descriptions. Illustrations of partial dissections of various plant parts would be used, where necessary, to ease identification. Black and white photographs would also be incorporated into the guide in

order to illustrate growth habit, size and habitat of each plant.

After attending the First Symposium on the Botany of the Bahamas, held on San Salvador in June 1985, L. Kass and A. Kowalski were able to remain for an additional week of study on San Salvador supported by a research grant from Dr. Gerace and the CCFL Field Station. During this time they did an intensive photographic study of habit and morphology for a specific group of plants to be illustrated. Dr. Robert R. Smith, Professor of Botany Hartwick College, generously assisted them in locating and identifying many of these plants. A. Kowalski made on-site sketches of the plants and after leaving San Salvador, was able to continue to prepare illustrations from both color slides, and herbarium specimens from the Hoystrat Herbarium at Hartwick College.

At the present time, more than fifty (50) plants have been illustrated and complete descriptions have been prepared for twenty five (25) of these plants. The authors presented to the participants of the Third Symposium on the Botany of the Bahamas, for their use and review, a copy of the guide to these 25 plants. During the symposium, the participants aided the authors in choosing an additional selection of plants which will be added to the original 25. A list of the plants presented at The Third Symposium, along with the plants which will be added, is presented in Table I.

ORGANIZATION OF THE GUIDE

Since one of the most obvious things that attract students (as well as pollinators)

to plants is their flowers, we chose to group the plants in this guide, first, into categories according to flower colors and then by arrangement of leaves. Students need only use the key to flower colors (yellow; white, red and pink; or other colored flowers) to locate the section of the guide where appropriate flower colors appear. Once in the appropriate section, a key to the arrangement of leaves will guide students to the specimens in that section. Looking through the illustrations and the descriptions, the reader may then identify the plant by both the common and scientific names. The classification system used in this field guide follows that of Correll and Correll (1982).

The descriptions have been written using English rather than Latin terminology; and have been divided into the categories of **Habit, Leaves, Flowers, Fruit, Remarks, and References**. Students without a knowledge of scientific terminology should be able to check identifications using both the illustration and the description. To use these descriptions, students need only be familiar with the names of plant organs and flower parts. The definitions for these terms are provided in the section titled "HOW TO USE THIS BOOK." The remarks section includes the plant's habitat, time of flowering, native origin and economic and/or medicinal use. Each plant description is cross referenced to Correll and Correll (1982), Smith (1982) and, where appropriate, Gorham et al. (1986).

The authors would like constructive criticism from both students and instructors in order to tailor the guide to their needs.

REFERENCES CITED

- Correll, D. S. and Correll, H. B., 1982. The Flora of the Bahama Archipelago. Vaduz: FL-9490 J. Cramer.
- Gorham, L., Plummer, C., and Smith, R., 1986. The flora of the CCFL Field Station, San Salvador, Bahamas. San Salvador, Bahamas: CCFL Bahamian Field Station. Occasional Paper, No.3.

Smith, R. 1982. Field Guide to the Vegetation of San Salvador Island, Bahamas. San Salvador, Bahamas: CCFL Bahamian Field Station.

TABLE I. List of plants presented at the Third Symposium on the Botany of the Bahamas and plants to be included in the final version of AN ILLUSTRATED GUIDE TO THE COMMON PLANT OF SAN SALVADOR ISLAND, BAHAMAS.

<u>FAMILY</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>PRESENTED AT SYMPOSIUM</u>	<u>ADDITION TO FIELD GUIDE</u>
AGAVACEAE	<i>Agave braceana</i> L.	Agave		X
ANACARDIACEAE	<i>Metopium toxiferum</i> (L.) Krug & Urb.	Poison Wood	X	
APOCYANACEAE	<i>Catharanthus roseus</i> (L.) G. Don	Periwinkle	X	
	<i>Echites umbellata</i> Jacq.	Wild Potato	X	
	<i>Nerium oleander</i> L.	Oleander	X	
	<i>Plumaria obtusa</i> L.	Frangipanni		X
	<i>Urechites lutea</i> (L.) Britt.	Wild Uction	X	
ASTERACEAE	<i>Ambrosia hispida</i> Pursh	Bay Geranium		X
	<i>Bidens alba</i> DC. var. <i>radiata</i>	White Beggar-ticks	X	
	<i>Borrchia arborescens</i> (L.) DC	Bay Marigold		X
	<i>Tridax procumbens</i> L.	Tridax		X
BIGNONIACEAE	<i>Tabebuia bahamensis</i> (Northrup) Britt.	Five Fingers		X
BORAGINACEAE	<i>Bouyeria ovata</i> Miers	Strong Back	X	
	<i>Mallotonia gnaphalodes</i> (L.) Britt.	Bay Lavender	X	
CACTACEAE	<i>Opuntia stricta</i> Haw. var. <i>dillenii</i> (Ker-Gawl.) L. Benson	Common Prickly-Pear		X
CARICACEAE	<i>Carica papaya</i> L.	Papaya		X
CASUARINACEAE	<i>Casuarina equisetifolia</i> (litorea) L.	Australian Pine		X
CHRYSOBALANACEAE	<i>Chrysobalanus icaco</i> L.	Coco Plum.	X	
CONVOLVULACEAE	<i>Ipomea pes-caprae</i> (L.) R. Br.	Railroad Vine		X
EUPHORBIACEAE	<i>Croton linearis</i> Jacq.	Granny-Bush	X	
	<i>Phyllanthus epiphyllanthus</i> L.	Hardhead		X
GENTIANACEAE	<i>Eustoma exaltatum</i> (L.) G. Don	Marsh Gentian	X	
GOODENIACEAE	<i>Scaevola plumieri</i> (L.) Vahl	Ink Berry		X

TABLE I. (continued)

<u>FAMILY</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>PRESENTED AT SYMPOSIUM</u>	<u>ADDITION TO FIELD GUIDE</u>
GRAMINEAE	<i>Cenchrus incertus</i> M. A. Curtis	Coast Sandspur		X
	<i>Sporobolus virginicus</i> (L.) Kunth	Seashore Rush-Grass		X
	<i>Uniola paniculata</i> L.	Sea Oats		X
LAURACEAE	<i>Cassytha filiformis</i> L.	Love Vine		X
LEGUMINOSAE	<i>Caesalpinia bonduc</i> (L.) Roxb.	Gray Nickers		X
	<i>Calliandra haematomma</i> (Bert.) Benth.	Red Anneslia	X	
	<i>Delonix regia</i> (Bojer ex Hook.) Raf.	Royal Poinciana	X	
	<i>Leucaena leucocephala</i> (Lam.) de Wit	Jumbay	X	
	<i>Mimosa bahamensis</i> Benth.	Haul Back		X
	<i>Stylosanthes hamata</i> (L.) Taub.	Pencil-Flower		X
MALVACEAE	<i>Hibiscus rosa sinensis</i> L.	Hibiscus	X	
	<i>Sida acuta</i> Burm. f.	Wire-Weed		X
MUSACEAE	<i>Musa nana</i> Lour.	Banana		X
PALMAE	<i>Cocos nucifera</i> L.	Coconut		X
PAPAVERACEAE	<i>Argemone mexicana</i> L.	Mexican Poppy	X	
PHYTOLACCA- CEAE	<i>Rivina humilis</i> L.	Wild Tomato	X	
POLYGONACEAE	<i>Coccoloba uvifera</i> (L.) L.	Sea Grape		X
RHIZOPHORACEAE	<i>Rhizophora mangle</i> L.	Red Mangrove	X	
RUBIACEAE	<i>Antirhea myrtifolia</i> (Griseb.) Urb.	Shiny Stenostomum	X	
	<i>Casasia clusiaefolia</i> (Jacq.) Urb.	Seven Year Apple	X	
	<i>Erithalis fruticosa</i> L.	Black Torch		X
	<i>Ernodea littoralis</i> Sw.	Common Ernodea		X
	<i>Rhachicallis americana</i> (Jacq.) O. Ktze.	Sandfly-Bush		X
	<i>Strumphia maritima</i> Jacq.	Strumphia		X
SOLANACEAE	<i>Solanum bahamensis</i> L.	Bahama Solanum	X	
SURIANACEAE	<i>Suriana maritima</i> L.	Bay Cedar		X
TILIACEAE	<i>Corchorus hirsutus</i> L.	Woolly Corchorus		X

TABLE I. (continued)

<u>FAMILY</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>PRESENTED AT SYMPOSIUM</u>	<u>ADDITION TO FIELD GUIDE</u>
TURNERACEAE	<i>Turnera ulmifolia</i> L.	Bahama Buttercup	X	
VERBENACEAE	<i>Lantana involucrata</i> L.	Wild Sage		X
	<i>Phyla nodiflora</i> (L.) Greene	Capeweed		X
	<i>Stachytarpheta jamaicensis</i> L.	Blue Flower	X	
ZYGOPHYLLA- CEAE	<i>Guaiacum sanctum</i> L.	Lignum Vitae	X	