

**PROCEEDINGS  
OF THE  
SEVENTH SYMPOSIUM  
ON THE  
NATURAL HISTORY OF THE BAHAMAS**

**Edited by  
Tom K. Wilson**

**Conference Organizer  
Kenneth C. Buchan**

**Bahamian Field Station, Ltd.  
San Salvador, Bahamas  
1998**

**Cover Illustration: ArcView GIS generated elevation map of San Salvador. Produced by Matt Robinson of the University of New Haven for the Bahamian Field Station**

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**Printed in USA by RSMAS, University of Miami, Miami, Florida**

**ISBN 0-935909-66-4**

# HOMEGARDENS OF CENTRAL ANDROS<sup>1</sup>

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## ABSTRACT

During the first field season of a long-term ethnobiological investigation of the central region of Andros Island, Bahamas, a homegarden study was conducted. The plant taxa growing in the yards of three settlements were tabulated, and the resultant data analyzed for trends.

The data showed a dominance of edible taxa, and of taxa with multiple uses. Many taxa were of a very low incidence level, perhaps showing personal preferences. Interestingly, taxa which showed up in only a few yards (but more than one) were sometimes indicators of inter-household relationships.

Thus, a homegarden study proved to be an excellent entree into a longer ethnobiological study. It familiarized the researchers with the area; it familiarized the islanders with the researchers and with their research agenda; and it sometimes gave the researchers insight into community dynamics.

## INTRODUCTION

This study is part of a long-term ethnobiological investigation conducted in the central region Andros Island. The focus of this part was the documentation of the plants grown in the yards of three settlements. The settlements of Andros, with the exception of Red Bays, are located along the east coast of the island. The inhabitants of these settlements reflect the multicultural heritage of other Androsian settlements, but are predominantly of African descent (Randolph, 1994; 1996). Like the inhabitants of other Family Islands, the people of Andros have had to rely upon local resources to meet their daily needs (Saunders, 1990). In the past, a system of "outback farms," which were located in the island's interior, met much of these needs, but this practice is seldom used today. Reasons for this vary from the inconvenience of such isolated farms to the ever-increasing damage caused by feral pigs (Randolph, 1994). Thus, home gardens are of increasing importance to Androsians.

## MATERIALS AND METHODS

This investigation was conducted from May-July 1991, as a primary step in an extended ethnobiological investigation. It was used as a means of introduction of the principal researcher to the people of Andros and to familiarize Androsians with the research project as a whole.

Accommodations on Andros Island were obtained from Forfar Field Station (International Field Studies), located in North Blanket Sound (Big Pond).

The principal investigator and a local assistant visited the households in three settlements and surveyed the plant taxa grown in each, with the exception of one. This was done with the permission of the householders. In some cases, householders accompanied the investigators, but this was not common. Data concerning the uses of the taxa were recorded, during this study, or obtained at a later date.

Specimens were taken of the taxa observed, except when the taxon was so infrequent that specimen collection would be disadvantageous to the householders, or when collection was prohibited by Bahamian research permits (i.e. Cactaceae and Orchidaceae).

These specimens were dried, as described in Randolph, 1994, and sent to the Willard Sherman Turrell Herbarium (MU). There, they were re-dried, fumigated and stored. Duplicate specimens will be provided to the Bahamian National Herbarium.

A variety of sources were used to identify plant taxa: Correll and Correll, 1982; Nickrent et al., 1991; Peterson and Stevenson, 1977; Ochse et al, 1961a, 1961b; Purseglove, 1968a, 1968b, 1972a, 1972b; Kingsbury, 1988; Bailey and Bailey, 1976; Graf, 1963, 1978; Facciola, 1990; Hendrick, 1972, Rollins, 1979). Additionally the resources of the Willard Sherman Turrell Herbarium (MU), Fairchild Tropical Gardens and the Dade County Fruit and Spice Park were helpful

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Paper previously submitted to the Bahamas Journal of Science

## RESULTS

Refer to Appendix 1.

## DISCUSSION

A home garden study proved to be an excellent method of entry into a long term ethnobiological study. It allowed the islanders to become familiar with the researcher and the researcher's long-term plans. It permitted the researcher to get to know the householders and to become familiar with the community dynamics and the important plant taxa of the region. This would be an excellent method to begin most broad-based ethnobiological research projects. The data show some interesting trends (see Appendix 1). The most common taxa are those native to the Caribbean and adjacent areas, but several Asian taxa (*Citrus aurantiifolia*, Native Lime; *Dioscorea alata*, yam; *Mangifera indica*, Mango; *Musa x paradisiaca*, Banana) and one African taxon (*Cajanus cajan* Pigeon pea) are in 60% or more of the households surveyed. In fact, banana shows the second highest level of occurrence, along with the South American native cassava (*Manihot esculenta*). This is not surprising since bananas, Asian yams and citrus entered Africa, the ancestral home of most Androsians (Randolph, 1994) at an early date. They were brought to the new world via the slave trade, as was the native African Pigeon Pea (Hall, 1991; Flint, 1974; Purselove, 1968a,b).

Thus, the majority of plants grown in home gardens reflect the African heritage of the islanders or they are crops native to nearby regions. The only crop of very high incidence that doesn't fit these patterns is mango. However mango has been in the region for a long time, having entered Brazil by 1700 and the West Indies by 1742. Today it is the most popular tropical fruit in the world (Simpson and Ogorzaly, 1986). It is notable that of the 16 taxa which occur in more than half of the households examined, all are edible plants, and 12 of the 16 have some additional use. Nine of those with additional uses include medicinal uses. This pattern of a high incidence of plants with multiple uses, especially food and medicinal uses, has been observed in other areas (Mexico: Gispert and González Romo, 1993). The data also shows that plants of very low incidence may be of interest. In one case, it was found that a plant which only occurred in only a few homes, (*Tillandsia usneoides*, Love me) indicated a relationship between the householders who had the plant. Additionally, a household which exhibits a high number of plants not found in other homes may indicate a unique heritage or background, and be cause for further investigation. Thus a home garden study may lead the researcher to a better understanding of community dynamics, and help in the planning of future field work.

## ACKNOWLEDGEMENTS

This research was funded by the Willard Sherman Turrell Herbarium Fund, Sigma Xi, the Explorer's Fund and Academic Challenge of Ohio. This support is greatly appreciated, as is the support and help of the people of Andros and the government of the Commonwealth of the Bahamas.

## BIBLIOGRAPHY

- Bailey, Liberty Hyde and E. Z. Bailey. 1976. Hortus Third: A Concise Dictionary of Plants Cultivated in the United States and Canada. MacMillan Publishing Co., Inc. New York.
- Campbell, D. G. 1990. The Ephemeral Islands, A Natural History of the Bahamas. MacMillan Education LTD. London and Basingstoke.
- Correll, D. S. and H. B. Correll. 1982. Flora of the Bahama Archipelago. Strauss and Cramer. Hirschberg, BRD.
- Facciola, Stephen. 1990. Cornucopia: A Source Book of Edible Plants. Kampong Publications. Vista, CA.
- Flint, J. E. 1974. Economic change in West Africa in the Nineteenth Century. In. History of West Africa Vol. 2. J.F. Ade Ajayi and Michael Crowder (eds.). Longman, London. pp. 380-401.
- Gispert, Monserrat and Claudia González Romo. 1993. *Plantas comestibles - plantas medicinales* □ *matrimonio en concordia?* Antropologicas 7: 58-64.
- Graf, Alfred Byrd. 1963. Exotica: Pictorial Cyclopedia of Exotic Plants. Roehrs Co. Rutherford, N.J.
- \_\_\_\_\_. 1978 Tropica: Color Cyclopedia of Exotic Plants and Trees. Roehrs Co. East Rutherford, N. J.
- Hall, Robert. 1991. Savoring Africa in the New World. In: Seeds of Change, A Quincentennial Commemorative. Smithsonian Institution, Washington D. C.
- Hendrick, U. P. (ed.) 1972. Sturtevant's Edible Plants of the World. Dover Publications. New York, N. Y.
- Kingsbury, John M. 1988. 200 Conspicuous, Unusual, or Economically Important Tropical Plants of the Caribbean. Bullbrier Press. Ithaca, N. Y.

- Morton, Julia. 1981. 500 Plants of South Florida. Fairchild Tropical Garden. Miami, Fla.
- Nickrent, Daniel L., W. Hardy Eshbaugh, and Thomas K. Wilson. 1991. The Vascular Flora of Andros Island, Bahamas. Willard Sherman Turrell Herbarium. Oxford, OH.
- Ochse, J. J., James Soule, M. J. Dijkman, and C. Wehlburg. 1961a. Tropical and Subtropical Agriculture Vol. 1. Macmillan Co. New York, N. Y.
- Ochse, J. J., James Soule, M. J. Dijkman, and C. Wehlburg. 1961b. Tropical and Subtropical Agriculture Vol. 2. Macmillan Co. New York, N. Y.
- Patterson, Jack and George Stevenson. 1977. Native Trees of the Bahamas. Bahamas National Trust. Abaco, Bahamas.
- Purseglove, J. W. 1968a. Tropical Crops; Dicotyledons 1. John Wiley and Sons. New York, N. Y.
- \_\_\_\_\_. 1968b. Tropical Crops; Dicotyledons 2. John Wiley and Sons. New York, N. Y.
- \_\_\_\_\_. 1972a. Tropical Crops; Monocotyledons 1. John Wiley and Sons, Halsted Press. New York, N. Y.
- \_\_\_\_\_. 1972b. Tropical Crops; Monocotyledons 2. John Wiley and Sons, Halsted Press. New York, N. Y.
- Randolph, Logan. 1994. An Ethnobiological Investigation of Andros Island, Bahamas. Dissertation. Miami University, Oxford, Ohio.
- \_\_\_\_\_. 1996. Medicinal Plants of Andros Island, Bahamas: A Cross-Cultural Study, pp. 61-76. In N.B Elliott, D.C. Edwards and P.J. Godfrey (eds.), Proceedings of the Sixth Symposium on the Natural History of the Bahamas, Bahamian Field Station, Ltd., San Salvador, Bahamas.
- Rollins, Chris B (Dir.). 1991. Preston B. Bird and Mary Heinlein Fruit and Spice Park Guide. Metro-Dade County Park and Recreation Department. Miami. Fla.
- Saunders, Gail. 1990. Bahamian Society After Emancipation. Privately Published. Nassau, Bahamas.
- Simpson, Beryl Brintall and Molly Conner-Ogorzaly. 1986. Economic Botany: Plants in Our World. McGraw-Hill Book Co. New York.
- Tomlinson, P. B. 1986. The Biology of Trees Native to Tropical Florida. Harvard University Printing Office. Allston, MA.

**APPENDIX 1**

TAXON	SETTLEMENT			TOTAL %	USES*
	A %	B %	C %		
<i>Persea americana</i>	98.87	73.91	80.95	81.03	F,M,A
<i>Manihot esculentus</i>	85.71	52.17	100	77.59	F,M
<i>Musa X paradisiaca</i>	78.57	68.57	85.71	77.59	F,A
<i>Carica papaya</i>	92.86	56.52	85.71	75.86	F,M
<i>Cajanus cajan</i>	71.43	65.22	80.95	72.41	F,M
<i>Citrus aurantiifolia</i> "Native Lime"	85.71	56.52	80.95	72.41	F,M
<i>Cocos nucifera</i>	21.43	78.26	100	72.41	F,M,B,O
<i>Manilkara zapota</i>	71.43	65.22	76.14	70.69	F,A
<i>Mangifera indica</i>	64.29	78.26	42.86	62.07	F
<i>Phaseolus vulgaris</i>	64.29	47.83	71.43	60.34	F
<i>Psidium guajava</i> "Native Guava"	64.29	52.17	66.66	60.34	F,M,A
<i>Annona muricata</i>	35.71	69.57	57.14	56.90	F,M,A
<i>Dioscorea alata</i>	64.29	47.83	61.90	56.90	F
<i>Citrus aurantium</i> "Bittersweet"	42.87	52.17	61.90	53.45	F,M
<i>Ipomoea batatas</i>	64.29	47.83	52.38	53.45	F
<i>Saccharum officinarum</i>	71.43	39.13	52.38	51.72	F,A
<i>Codiaeum variegatum</i> other types	50	34.78	61.90	48.28	O,M
<i>Annona squamosa</i>	78.57	39.13	33.33	46.55	F,M
<i>Coccoloba uvifera</i>	78.57	26.09	47.62	46.55	F,M
<i>Melicoccus bijugatus</i>	42.87	39.13	57.14	46.55	F,A
<i>Spondias purpurea</i>	28.57	39.13	57.14	43.10	F
<i>Citrus aurantiifolia</i> "Persian Lime"	57.14	17.40	57.14	41.38	F,M
<i>Polyscias spp.</i>	21.43	43.48	61.90	41.38	O,M
<i>Catharanthus roseus</i>	50	34.78	33.33	37.93	O,M
<i>Codiaeum variegatum</i> "Corkscrew"	50	13.04	57.14	37.93	O,M
<i>Capsicum annum</i> "Native pepper"	21.43	26.09	57.14	36.21	F
<i>Terminalia catappa</i>	35.71	8.70	61.90	34.48	F,A
<i>Annona reticulata</i>	21.43	26.09	47.62	32.76	F
<i>Hibiscus rosa-sinensis</i>	28.57	17.40	52.38	32.76	O
<i>Ricinus communis</i>	21.43	39.13	33.33	32.76	M
<i>Zea mays</i>	28.57	26.09	42.86	32.76	F,A
<i>Spondias mombin</i>	64.29	4.34	38.10	31.03	F
<i>Mammea americana</i>	42.87	13.04	38.10	29.31	F
<i>Pouteria campechiana</i>	42.87	21.74	19.05	25.86	F
<i>Tamarindus indica</i>	14.29	26.09	33.33	25.86	F
<i>Brassaia actinophylla</i>	57.14	8.70	19.05	24.14	O
<i>Kalanchoë pinnata</i>	14.29	26.09	28.57	24.14	O,M
<i>Citrus aurantiifolia</i> "American Lime"	14.29	39.13	9.52	22.41	F,M

\* A-Animal Food; B-Baskets; C- Charcoal; F-Food; Fe-Fertilizer; Fi-Fiber; Fo-Folklore; I-Insect repellent smoke; M-Medicinal; O-Ornamental; W-Woodcarving

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TAXON	SETTLEMENT			TOTAL %	USES*
	A %	B %	C %		
<i>Codiaeum variegatum</i> "Fish Tail"	50	13.04	14.29	22.41	O,M
<i>Colocasia esculenta</i>	35.71	4.34	23.81	18.97	F
<i>Cordyline terminalis</i>	50	0	19.05	18.97	O
<i>Setcreasea pallida</i>	42.87	4.34	19.05	18.97	O
<i>Acalypha wilkesiana</i>	42.87	17.40	0	17.24	O,M
<i>Anethum graveolens</i>	42.87	8.70	9.52	17.24	F,M
<i>Helianthus argophylla</i>	0	17.40	28.57	17.24	O
<i>Lycopersicon esculentum</i>	7.14	13.04	28.57	17.24	F
<i>Rhoeo spathacea</i>	35.71	8.70	14.29	17.24	O
<i>Citrullus lanatus</i>	21.43	4.34	23.81	15.52	F
<i>Aloe vera</i>	21.43	8.70	19.05	13.82	M
<i>Cucurbita pepo</i>	21.43	4.34	19.05	13.80	F
<i>Pedilanthus tithymaloides</i>	14.29	17.40	9.52	13.80	O
<i>Psidium guajava</i> "American Guava"	21.43	13.04	9.52	13.80	F,M,A
<i>Casuarina equisetifolia</i>	7.14	21.74	4.76	12.07	O,S,W,Fe
<i>Flacourtia indica</i>	42.87	0	4.76	12.07	F
<i>Syngonium podophyllum</i>	21.43	8.70	9.52	12.07	O
<i>Abelmoschus esculentum</i>	7.14	13.04	9.52	10.34	F
<i>Ambrosia hispida</i>	14.29	4.34	14.29	10.34	M,O
<i>Bougainvillea</i>	14.29	0	19.05	10.34	O
<i>Hymenocallis arenicola</i>	14.29	0	19.05	10.34	O,M
<i>Ipomoea fistulata</i>	7.14	4.34	9.52	10.34	O
<i>Philodendron sp.</i>	7.14	4.34	19.05	10.34	O
<i>Allium cepa</i>	7.14	17.40	0	8.62	F
<i>Annona glabra</i>	14.29	4.34	9.52	8.62	F,A
<i>Asparagus spp.</i>	7.14	8.70	9.52	8.62	O,M
<i>Citrus X paradisi</i>	21.43	4.34	4.76	8.62	F,M
<i>Delonix regia</i>	14.29	0	14.29	8.62	O
<i>Vitis munsoniana</i>	14.29	8.70	4.76	8.62	F
<i>Malpighia glabra</i>	7.14	0	14.29	6.90	F
<i>Maranta arundinacea</i>	0	8.70	9.52	6.90	F,M
<i>Zebrina pendula</i>	28.57	0	0	6.90	O
<i>Zephranthes rosea</i>	14.29	0	9.57	6.90	O
<i>Canna indica</i>	0	4.34	9.52	5.17	O
<i>Capsicum annum</i> var. <i>aviculare</i>	0	8.70	4.76	5.17	F
<i>Capsicum annum</i> "Sweet pepper"	0	8.70	4.76	5.17	F
<i>Crinum zeylanicum</i>	0	0	14.29	5.17	O,M
<i>Dieffenbachia sp.</i>	14.29	0	4.76	5.17	O
<i>Juniperus barbadense</i>	21.43	0	0	5.17	F,M,W
<i>Morinda citrifolia</i>	0	0	14.29	5.17	O,F
<i>Pinus caribaea</i> var. <i>bahamensis</i>	14.29	0	4.76	5.17	C,M,O

\* A-Animal Food; B-Baskets;C- Charcoal; F-Food; Fe-Fertilizer; Fi-Fiber; Fo-Folklore; I-Insect repellent smoke; M-Medicinal; O-Ornamental; W-Woodcarving

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TAXON	SETTLEMENT			TOTAL %	USES*
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<i>Pseuderanthemum purpureum</i>	0	0	14.29	5.17	O
<i>Sansevieria hyacinthoides</i>	14.29	0	4.76	5.17	O,Fi
<i>Tagetes erecta</i>	0	4.34	9.52	5.17	O
<i>Thespesia populnea</i>	0	0	14.29	5.17	O
<i>Tillandsia usneoides</i>	7.14	8.70	0	5.17	O,Fo
<i>Araucaria heterophylla</i>	14.28	0	0	3.45	O
<i>Artocarpus altilis</i>	7.14	4.34	0	3.45	F
<i>Crotalaria spectabilis</i>	7.14	0	4.76	3.45	O,M
<i>Cucumis melo</i>	0	0	9.52	3.45	O
<i>Ficus elastica</i>	7.14	0	4.76	3.45	O,F
<i>Jacaranda coerulea</i>	7.14	0	4.76	3.45	O,M
<i>Jasminum fluminense</i>	7.14	0	4.76	3.45	O
<i>Nerium oleander</i>	0	4.34	4.76	3.45	O
<i>Opuntia cochinellifera</i>	7.14	0	4.76	3.45	O,M
<i>Pseudophoenix sargentii</i>	0	4.34	4.76	3.45	O
<i>Sesamum indicum</i>	0	0	9.52	3.45	F
<i>Tecoma stans</i>	0	0	9.52	3.45	O
<i>Thuja orientalis</i>	0	0	9.52	3.45	O
<i>Agave sisalana</i>	0	0	4.76	1.72	O,Fi
<i>Ananas comosus</i>	7.14	0	0	1.72	F
<i>Apium graveolens</i>	0	0	4.76	1.72	F,M
<i>Arachis hypogaea</i>	0	0	4.76	1.72	F
<i>Capsicum annuum</i> "Goat pepper"	0	0	4.76	1.72	F
<i>Capsicum frutescens</i>	0	0	4.76	1.72	F
<i>Celosia</i> sp.	0	4.34	0	1.72	O
<i>Citrus reticulata</i>	7.14	0	0	1.72	F,M
<i>Citrus sinensis</i>	0	0	4.76	1.72	F,M
<i>Coccoloba diversifolia</i>	7.14	0	0	1.72	F,O,M
<i>Cocothrinax argentata</i>	7.14	0	0	1.72	B,O
<i>Colocasia</i> sp.	0	4.34	0	1.72	O
<i>Commelina</i> sp.	7.14	0	0	1.72	O
<i>Dracaena</i> sp.	7.14	0	0	1.72	O
<i>Euphorbia pulcherrima</i>	7.14	0	0	1.72	O
<i>Hylocereus undatus</i>	7.14	0	0	1.72	F,O
<i>Jatropha gossypifolia</i>	0	0	4.76	1.72	O
<i>Malva viscus arborescens</i>	0	0	4.76	1.72	O
<i>Monstera deliciosa</i>	7.14	0	0	1.72	O
<i>Ocimum basilicum</i>	0	0	4.76	1.72	F,M
<i>Phoenix dactylifera</i>	7.14	0	0	1.72	O
<i>Plumeria rubrum</i>	0	0	4.76	1.72	O
<i>Rosa</i> sp.	0	0	4.76	1.72	O
<i>Solanum tuberosum</i>	0	0	4.76	1.72	F
<i>Tillandsia valenzuelana</i>	7.14	0	0	1.72	O
<i>Yucca aloifolia</i>	0	4.34	0	1.72	O
<i>Zamia floridana</i>	7.14	0	0	1.72	O

\* A-Animal Food; B-Baskets; C- Charcoal; F-Food; Fe-Fertilizer; Fi-Fiber; Fo-Folklore; I-Insect repellent smoke; M-Medicinal; O-Ornamental; W-Woodcarving