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BUSH MEDICINE STUDIES, ANDROS ISLAND, BAHAMAS

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Andros Island, Bahamas is the largest island in the archipelago. It is approximately 175 km long and 110 km wide totaling an area of 5,957 sq km. However, it is not an island in the normal sense, but rather a loose assemblage of land forms separated by water. This is especially true in the south. The highest land is found along the east coast with low, sparsely vegetated, frequently inundated, salt flats comprising the western 2/3 of the island. The more than 8000 people of Andros live in scattered communities along the east coast, a mere 210 km from Florida and its millions of inhabitants stretching in one continuous community from Miami to Jacksonville. The contrast in the practice of medicine in these two neighboring regions could hardly be more startling.

As with any widely scattered population in a large land area with a limited transportation system, there is a need to be self-sufficient for day to day survival. On Andros Island, from Nichols Town in the north to Mars Bay in the south, there are only a few (3-4) resident physicians. Clinics are held once a week or less frequently in the outlying communities interspersed between the major population centers of Nichols Town, Fresh Creek, and Congo Town. In such a situation, non-traditional medical practices were bound to thrive. The pre-island heritage of most of the inhabitants can be found in the African continent with its vast folk-lore associated with plant use in medicine.

More than two centuries of residence in the Bahamas Archipelago has provided an opportunity for the people to transfer previously accumulated knowledge of plant use from Africa while experimenting with the native plants of the island. This has led to a medical network, largely maintained by the "grannies" (Fig. 1) who dispense their knowledge both in competition with and in the absence of doctors (McClure, 1982; McClure and Eshbaugh, 1983).

In 1976 Miami University (Ohio) initiated a course on the Tropical Flora of the Bahamas taught at the Forfar Field Station at Blanket Sound. Several students became interested in the bush medicine tradition of the people and this interest has been extended to more detailed studies. Studies of bush medicine have taken several forms. Most often extensive lists of plants used by the people on a specific island have been published (Eldridge, 1975 (Exumas and Long Island); Halberstein and Saunders, 1978 (Bimini); Anonymous, 1971 (San Salvador); Yamamoto, 1973 (San Salvador)). Sometimes this information has been accumulated in treatises on a region (Ayensu, 1981; Morton, 1981). Our studies have been limited to more extensive community surveys or a detailed look at a particular group of plants and how it is used.

Methods

During the course of four separate field study trips, various informants were interviewed and their comments on traditional plant use recorded (Fig. 2). In the early stages of this work, the primary record was in the form of field notes. Later these studies graduated to a more sophisticated system in



Figure 3: Four of the plants used in Andros Island love potions: a, Cassytha filiformis (Love Vine); b, Bourreria ovata (Strong Back); c, Diospyros crassinervis (Stiff Cock); and d, Tabebuia bahamensis (Five Finger). (Photos W. H. Eshbaugh)



Figure 1: Mrs. Amelia Marshall, a well-known "granny" or "bush medicine" woman from Red Bays, North Andros Island, Bahamas. (Photo C. Rowand)

Some ingredients of Andros Island, Bahamas, love potions.

SCIENTIFIC NAME	INFORMANT	NOTES
Names are arranged by family and follow the treatment of Correll and Correll (1982).	Plant part used	Chemical components/ other areas used in love potions
Bignoniaceae		
<i>Tabebuia bahamensis</i> (Northrop) Britt.	Leafy twig	Lapachol in genus/ Trinidad & Jamaica
Boraginaceae		
<i>Bourreria ovata</i> Miers	Leafy twig	
<i>Cordia bahamensis</i> Urb.	Leafy twig	
Burseraceae		
<i>Bursera simaruba</i> (L.) Sarg.	Leafy twig	Ethereal oils, tannins, sterols/ Bahamas
Ebenaceae		
<i>Diospyros crassinervis</i> (Krug. & Urb.) Standl.	Leafy twig	Long & Exuma Islands, Bahamas
Erythroxylaceae		
<i>Erythroxylon rotundifolia</i> Lunan	Leafy twig	
Lauraceae		
<i>Cassytha filiformis</i> L.	Vine	Alkaloids / Long & Exuma Islands, Bahamas

Figure 2: Primary plants used in love potions by various Andros Island informants. (Adapted from McClure and Eshbaugh, 1983)

which conversations were recorded and archival tapes preserved and deposited at Miami University (MU). Interview methods largely followed the procedures outlined by Wood (1975). Our primary informants, without whose cooperation this study would have been impossible, included Mrs. Annie Colebrook, Mr. Doc Curry, Mr. Charlie Gilcot, Mrs. Amelia Marshall, Mr. James Thompson, Ms. Rosie Tusco, Mrs. Lona Williams, Mrs. Ella Woodside, and Mrs. Ena Woodside. Often, to confirm what we had learned from these resources, the informants were visited several times to assure our understanding of what had been said during an earlier visit. One of the more difficult aspects of our work was simply linking common names with an actual plant being used. We have initiated comprehensive survey of the literature to determine what is known about the secondary constituent and pharmacological activity of isolates from medicinal plants used in the Bahamas. We have also done some original studies on chemical constituents in collaboration with several laboratories. To date, our most detailed studies have centered on that group of plants known as "love potions".

One might wonder why the use of medicinal teas is so prevalent. The obvious reason is that in general the native medicinal practitioner has no means, other than boiling in water, for extracting the active ingredients from the plants. A few "grannies" have learned that alcohol will extract some plant substances that are not water soluble. In these cases, plant parts are aged in gin or rum.

Results

Love potions are herbal teas drunk to maintain or restore sexual stamina. Much folk-lore is associated with the use of these plants. For whatever reason, these love potions are esteemed by the native people and used outside the remedies of traditional medicine. Both women and men use these teas and certain specific plants are supposed to have specific actions on the male or female user.

Six plants, Tabebuia bahamensis, (five-fingers, big-man), Bourreria ovata (Strong-back), Bursera simaruba (gum elemi), Diospyros crassinervis (feather-bed) (stiff cock), Erythroxylon rotundifolia (Bohog), and Cassytha filiformis (love-vine) are the primary ingredients of Andros Island love potions. Only Tabebuia bahamensis and Diospyros crassinervis are used by every informant. Those two plants, big man and stiff cock, are primarily male plants and essential for male aphrodisiac teas. Other plants used on a limited basis by individual informants include Phorandendron sp., Cordia bahamensis, Swietenia mahogoni, Eugenia axillaris, Pinus caribaea, and Thouinia discolor.

All the Bahamian informants brewed a tea using a combination of several herbs for energy which is necessary for maintaining sexual stamina. The action of these teas is described as "to build you up", "to raise the blood", "to strengthen the back", and "for strength" (McClure and Eshbaugh, 1983). It is interesting to note in Eldridge's (1975) investigation of Bush Medicine on Long Island, Bahamas there is little discussion of the role of combined teas as love potions.

Erythroxylon rotundifolia is used to make a tea for a "broken-down" system. Love-vine (Cassytha filiformis) and gum olomi (Bursera simaruba) are used as an aphrodisiac. Eldridge (1975) indicates no informant would discuss the aphrodisiac role of Diospyros crassinervis (stiff cock).

Likewise, Morton (1981) mentions the aphrodisiac quality of teas made from some of these plants but does not discuss the combining of these several plants into a common tea. On Andros, it is clear that these admixtures are created in the belief that the combined (synergistic) effect has a greater potential (benefit) for the user. In all cases, the number of ingredient plants ranged from 5 to 10 species with the number of primary species being between 4 and 6 species (McClure and Eshbaugh, 1983).

1. BIGNONIACEAE

Tabebuia bahamensis (Fig. 3d)

This plant has a number of uses ranging from a pain killer (Eldridge, 1975; Halberstein and Saunders, 1978) to anesthetic (Halberstein and Saunders, 1978). On Andros, as elsewhere in the Bahamas, the bark is stripped and used either separately or in combination with other species to make a tonic that strengthens or "builds up" the body. Halberstein and Saunders (1978) provide an extensive list of chemicals that have been isolated from this species but little is known of their activity in the human body.

2. BORAGINACEAE

Bourreria ovata (Fig. 3b)

The multiple use of this species includes a tea to treat

colds and flu (Eldridge, 1975) or a tonic to overcome "tired blood" and nervous tension (Halberstein and Saunders, 1978). The tea made from the bark turns red which may explain the importance attached to its use in blood associated disorders. On Andros, it is used as a sex stimulant to overcome impotence "when a man's system is rundown". Chemicals isolated from the plant include gentisic acid, a phenolic acid, and various pyrrolizidine alkaloids (Halberstein and Saunders, 1978).

3. EBENACEAE

Diospyros crassinervis (Fig. 3c)

Eldridge (1975) notes that use of this plant for "weak backed" (bedwetting) children. She also notes its use as a female tonic twice a month to "bring you back". On Andros this plant is recognized by both men and women as a male aphrodisiac. Little is known about the chemistry of this species although extensive investigations of the chemistry of other species of Diospyros exist in the literature. There may well be some correlation between the several known chemicals in Diospyros virginiana and their medicinal properties and use of D. crassinervis (McClure, 1981).

5. ERYTHROXYLACEAE

Erythroxyton rotundifolia

This relative of coca is commonly used in medicinal teas for a "broken down" system (Eldridge, 1975). Its role in love potions is obscure although it is a primary ingredient of most practioners. No informant indicated a major role for this species. There is little information in the literature on the secondary constituent chemistry of this taxon.

6. LAURACEAE

Cassytha filiformis (Fig. 3a)

This is a plant of many varied uses. The whole plant is boiled to make a concentrated liquor that may be drunk or applied to the skin. It is used to treat rheumatism and as a pain reliever (Eldridge, 1975; Halberstein and Saunders, 1978). It is one of the primary ingredients in a love potion which is drunk to improve sexual stamina. The tea made from "love vine" is reported to have a stimulating effect. However, whether it is a sexual stimulant remains to be documented. Some chemicals identified from this species include Dulcitol, para-hydrobenzoic acid, gentisic acid, and a phenolic acid (Halberstein and Saunders, 1978). Alkaloids have been reported by several workers.

A summary of known pharmacological aspects of these taxa has been provided by McClure and Eshbaugh (1983). None of the reported ingredients has yet to be linked to those classes of hormones or chemical compounds associated with fertility factors in the human species. Clearly, these species deserve closer chemical examination. Their use may have arisen for purely symbolic reasons. Nonetheless, the widespread use of each taxon, both separately and collatively, in herbal teas merits further consideration.

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