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Source: *Geographical Review*, Vol. 80, No. 2, (Apr., 1990), pp. 118-131

Published by: American Geographical Society

Stable URL: <http://www.jstor.org/stable/215476>

Accessed: 03/05/2008 12:43

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SACRED LEAVES OF BRAZILIAN CANDOMBLE*

ROBERT VOEKS

ABSTRACT. Candomblé religion diffused from the Yoruba area of West Africa to Bahia, Brazil, via the slave trade. Use of plants for spiritual and medicinal purposes is fundamental to the practice of Candomblé. Religious leaders retained elements of their ethnoflora by importing Old World species and by using accidentally introduced weeds. Brazilian species were substituted, when it was not feasible to use African ones. The biogeographical similarity of the two distant areas facilitated successful diffusion of this African religion to the New World.

AFRICAN slave laborers brought many aspects of their culture to their New World home. Long after importation of slaves ceased, the stamp of African music, dance, language, and cuisine remains permanently affixed in Latin American cultural landscapes. Of specific importance are the African belief systems that, however modified, have persisted and in some cases flourished (Bastide 1971). Santería has spread from a base in Cuba to many large North American cities. Umbanda now claims more than thirty million adherents and rivals Roman Catholicism as the dominant religion in Brazil (Brown and Bick 1987). However, it is Yoruba-originated Candomblé, centered in Salvador, Bahia, that is thought to represent the most orthodox expression of African magico-religion in the New World (Fig. 1) (Carneiro 1961; Verger 1981).

The focus of Candomblé worship is the maintenance of a harmonious relationship between religious followers and the African gods, known as *orixás*. The *orixás* are associated with natural elements: earth, water, fire, wind. Reduced in number from the Yoruban pantheon, these deities early assumed the names but not the identities of Roman Catholic saints. Oxossi, the *orixá* of the hunt, became Saint George; Yemanjá, the goddess of the sea, became Our Lady of the Conception.

Most religious activities are carried out at holy houses, or *terreiros*. These include various healing, devotional, and initiation ceremonies that usually involve drumming, chanting, dancing, animal sacrifice, divination, and spirit possession of both *terreiro* initiates and members. Activities within the *terreiro* are coordinated by a practitioner, known as the *babalorixá*. In contrast to their African progenitors, who are always male, the practitioners in Brazil may be of either gender. In Nigeria and Benin, a clear division exists between the role of the *babalawo*, who mediates relations with the *orixás* via divination, and the leaf doctor, or *onisegun*, who treats physical and emotional illness

* Research was funded by a summer stipend award from the National Endowment for the Humanities and by a faculty research grant from California State University, Fullerton. I gratefully acknowledge the advice and assistance of Talmon Santos, Pierre F. Verger, and Janira Barcellos Voeks.

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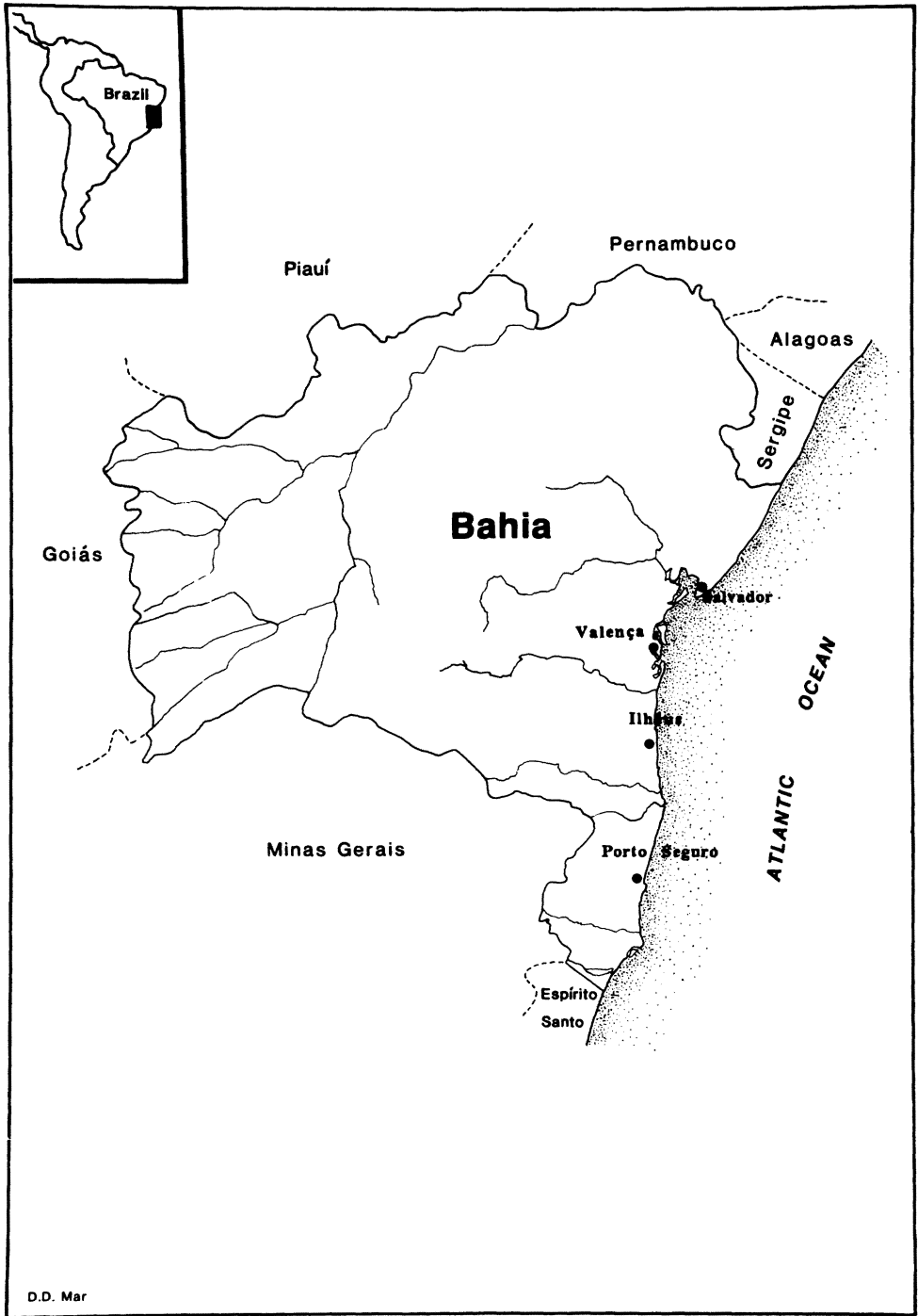


FIG. 1—Bahia.

(Durodola 1986, 20–25). In Brazil the two functions have fused, and the babalorixá has assumed the position of shaman and healer.

The most fundamental religious secret of a babalorixá is the knowledge of how to collect, prepare, and administer consecrated plants (Figueiredo 1983; Gouvea 1977). Among Candomblé followers a highly esteemed babalorixá is a person “who knows all the leaves” (Costa Lima 1963). To surrender this knowledge to anyone except an initiate is to invite severe spiritual punishment. Plants and their products are integral components in almost every Candomblé ritual, ceremony, and celebration. Ethnobotanical knowledge is basic to the practice and ultimately to the existence of Candomblé.

The persistence of this magico-religion in the New World poses some intriguing questions. On the assumption that ethnobotanical knowledge requires long association with the local flora, it follows that early Yoruba religious practitioners in Brazil were faced with a material dilemma—importing African plants or substituting local species. Inasmuch as the status of each babalorixá depended on his ability to heal with plants, this problem was not trivial. Given the successful diffusion of this religion, it can be assumed that the dilemma was satisfactorily resolved.

The objectives for this article are threefold: to review the role of plants in Candomblé worship, to examine the processes of species introduction and substitution, and to consider these phenomena as well as the adoptive social and political environment in the broad context of cultural diffusion to the New World.

FIELD METHODS AND STUDY AREA

Fieldwork for this study was carried out from June through August 1988 in and around Salvador, Bahia. Founded in 1548, this city of more than 1.5 million is overwhelmingly dominated by people of African descent. More than 2,000 registered houses of Candomblé worship currently exist in Bahia. Salvador, with Candomblé genealogies dating to the early nineteenth century, is called the Black Rome of Brazil. Extensive interviews were held with three babalorixás. By participating in preliminary initiation rites for one of the terreiros, I was able to observe plant-use ceremonies as well as to overcome some reluctance exhibited by practitioners to discuss their ethnoflora. Information included vernacular Portuguese and Yoruba names of species and their principal qualities and uses. In some cases the orixá associated with each plant was identified. The diffusion of food plants and ceremonies, which are also basic to devotional activities, was not examined.

Plants were collected in the field and in fetish gardens in the company of Candomblé initiates. Other samples were purchased at medicinal herb markets that cater to the local demands of Candomblé followers and to the practitioners of secular folk medicine (Fig. 2). Because their proprietors are not conscripted to secrecy, herb markets are especially rich sources of ethnobotanical data. Species were identified by regional specialists at the Her-



FIG. 2.—Herbalist selling spiritual and medicinal plants at the Feira de São Joaquim market.

barium, Centro de Pesquisas do Cacau, Itabuna, Bahia, and through consultation with local floras (Inventário 1979; Silva, Lisboa, and Santos 1982). Because much of the plant material was sterile, several taxa could be identified only to genus or family. At least one use for each of the 160 species was described by informants; 105 of these plants were collected, and 94 were identified to species or genus.

SACRED LEAVES

Yoruba knowledge of liturgical plants arrived in Brazil in the form of hundreds of incantations, or *cantos*. Slowly divulged to worthy initiates during the long years of indoctrination, these *cantos* yield various types of information, including the use of plants, their preparation, their African names, and the orixá to which they belong. Still chanted in the Yoruba language, these verses serve not only as mnemonic devices but also as a means to bring out the spiritual power of the leaves. In many cases, the knowledge of these *cantos* is the distinction between a serious Candomblé practitioner and a folk-medicinal healer.

Leaves, seeds, and living plants serve liturgical functions (Table I). They are used to extricate malevolent spirits, to induce the presence of favorable orixás, to make good and bad magic, to ward off evil eye, and to treat medical problems. The most guarded ethnobotanical secrets are those associated with initiation ceremonies, especially ones involving the twenty-one sacred leaves.

TABLE I—LITURGICAL PLANT USE

USE	% ^a	FUNCTION ^b	SPECIES ^c
Tea	37.0	med	<i>Peperomia pellucida</i> (NW; Piperaceae)
Bath	30.1	cle	<i>Newbouldia laevis</i> (Af; Bignoniaceae)
Shake	14.0	cle	<i>Brysonima sericea</i> (NW; Malpighiaceae)
Decoration	9.3	ev	<i>Dieffenbachia picta</i> (NW; Araceae)
Powder	4.3	mag	<i>Xylopiia aethiopicia</i> (Af; Annonaceae)
Incense	4.3	sal	<i>Cymbopogon martini</i> (OW; Graminae)
Syrup	2.0	ini	<i>Ipomea pes-caprae</i> (pan; Convolvulaceae)
Perfume	1.0	ud	<i>Pogostemum patchouly</i> (OW; Labiatae)
Spice	1.0	ud	<i>Ocimum basilicum</i> (OW; Labiatae)
Oil	1.0	cle	<i>Elaeis guineensis</i> (Af; Palmae)
Chew	1.0	pow	<i>Cyperus rotundus</i> (pan; Cyperaceae)
Wine	1.0	med	<i>Caesalpinia ferrea</i> (NW; Caesalpinaceae)
Unstated	23.6		

^a Percentage of total ethnoflora used for a specific function. Total percentage of all functions is greater than 100 percent because several species serve more than one use.

^b Symbols for functions: med = medicine, cle = cleansing, ev = protection from evil eye, mag = magic, ini = initiation, sal = salutation to orixá, pow = power, ud = undisclosed.

^c First item in parentheses indicates origin of species; second item is family of species. Symbols for origin: NW = New World, OW = Old World, Af = Africa, pan = pantropical.

Through the use of herbal baths and infusions, initiates are maintained in a docile and receptive mental state, some would say brainwashed, to facilitate spirit possession by the appropriate orixá (Carneiro 1961, 106; Fichte 1976, 336–339; Verger 1981, 44).

Most species are utilized for the purported power of their leaves. Roots, rhizomes, bark, seeds, flowers, and living specimens are employed with less frequency than are the leaves. Some species serve only a single purpose, but others have many. For example, the stems of *mamona* (*Ricinus communis*), hung from the necks of African wet nurses, were thought to reduce the pain of constant lactation. The varied uses of *dandá da costa* (*Cyperus rotundus*) include the preparation of a magical powder, placement in amulets, steeping in water for spiritual baths, and masticating for personal power.

Sacred leaves are most frequently taken internally as a tea or poured over the body, beginning at the shoulders, as a spiritual bath. The teas are prescribed for medicinal, not spiritual, problems and are as much a part of regional folk medicine as they are of religious use. On the other hand, cool baths prepared with the leaves of three or more species serve the liturgical function of spiritual cleansing. These prescriptions are made by a babalorixá after divining with the appropriate orixá via a shell toss, or *jogo de buzios*. After entering a state of trance, a babalorixá throws cowries onto a table, the configuration of which reveals the source of the specific problem and its solution (Braga 1988). A gratuity is expected for these consultations. The leaf prescription is then purchased from an herbalist, and the appropriate concoction is applied in privacy.

The remaining elements of the ethnobotanical complex are employed solely by a babalorixá and initiates. During cleansing and initiation, fresh leaves are shaken over and above the body. Before festivals, the leaves of

plants pertaining to a specific orixá are scattered on the floor of the terreiro. Living plants are often placed at the entrance to the terreiro. Usually rhizomatous, these leafy species require little attention and discourage the evil eye.

Various Old World aromatic plants, especially mints, are employed as incense. Their dried leaves are burned over coals near the entrance to the terreiro as a salutation to the orixás. The aromatic rhizomes of *dandá da costa* are chewed by Candomblé practitioners during discussions to influence other people. This practice may have its origin in Nigeria, where a defendant in court chews a similarly aromatic sedge, *Cyperus articulatus*, as a charm to secure acquittal (Meek 1931, 304–305).

Powders derived from plant parts are associated with the dark side of Yoruba and Candomblé worship. Slipped under the long fingernail of a practitioner, magical powder is or was surreptitiously transferred to an unsuspecting victim during a handshake. Not surprisingly, practitioners to this day resist greeting their peers with a handshake. Powder made from the seeds of *Xylopica aethiopica* continues to serve identical black-magic purposes in Nigeria and Bahia. Known as *atâre* among the Yoruba and as both *pimenta da costa* and *atâre* among Bahians, the powder from this species is scattered in the home of an intended victim to induce disease or to bring general disorder to the household (Buckley 1985, 62).

The weedy herb *Bryophyllum pinnatum*, native to Madagascar, has become pantropical in distribution. It has the unusual habit of sending out roots from the serrations of its succulent leaves. This peculiar vegetative property has led to various fetish uses in Africa. Among the Yoruba, who call it *èji ogbè*, it is believed that its possession will lead to the acquisition of money (Verger 1967, 10–11; Burkhill 1985, 557–558). In Bahia this species, called *folha da fortuna*, or leaf of fortune, is nailed to the wall of a terreiro in order to attract money.

Some species, such as the African oil palm (*Elaeis guineensis*), appear to be indispensable to both Yoruba and Candomblé worship. Known as *dendê* in Nigeria and Bahia, the rich copper-colored kernel oil of this palm is used in the preparation of almost all spiritual food offerings. Some are eaten by participants at celebrations. Other offerings are doused with the blood of freshly sacrificed Angolan chickens, doves, and goats and then mixed with the oil of *dendê*. These are later deposited in a holy place such as a lake, forest, or crossroad. Additionally during celebrations the terreiro ceiling is festooned with finely shredded palm leaves. Fashioned from the incipient fronds of *dendê*, this decorative material is known as *mârîwô* in Nigeria and *mariô* in Bahia (Fig. 3) and functions to welcome the proper orixás.

The data presented here are preliminary and incomplete, though perhaps representative of Candomblé plant use. Much remains to be learned about the symbolic role and functions of plants, especially those used during initiation. In Salvador alone, Candomblé practitioners count more than five



FIG. 3—Initiate collecting young palm fronds from an African oil palm. Leaflets are later shredded and hung from the ceiling of a terreiro.

hundred species as part of their ethnoflora (Fichte 1976, 341–352). Additionally each would-be babalorixá, on receiving the knowledge of the leaves, ventures forth to establish his or her own terreiro. The depth and accuracy of this body of oral tradition are directly related to the ability of the practitioner. Given the independent status of each terreiro, it is unlikely that anything approaching a clearly defined Candomblé flora exists. Nevertheless, these results suggest that plant use and knowledge permeate nearly every facet of worship and that much of this ethnobotanical tradition has its origins in Africa.

ORIGINS OF CANDOMBLÉ PLANTS

To retain their spiritual power in the New World, holy men had the option of either importing African plants or adopting local ones. Both actions were constrained by the position of the priests in Bahian slave society. Folk wisdom holds that slaves somehow smuggled sacred species during the Atlantic crossing. However, there is no documentation supporting this assertion, and the notoriously brutal conditions imposed during capture, transport, and sale must largely rule out this option (Filho 1946; Conrad 1983).

If Africans introduced their Yoruban ethnobotanical complex, then at the very least a significant portion of Candomblé species should be of African or other Old World origin. Of the ninety-four species identified in this study,

35 percent have an Old World origin, 49 percent are New World, and 16 percent are uncertain (Jackson 1895; Willis 1973; Heywood 1978). The last group, mostly members of pantropical families, has been so widely dispersed in the past that their origin has not been determined. Whether the majority of Old World plants were purposely introduced or arrived inadvertently during the slave trade is problematic.

The fact that the soils and climate of two distant points are similar increases, but in no way guarantees, the possibility that species introductions will be successful. Tropical trees require many years before they become reproductive, and their seeds are notoriously recalcitrant. Moreover, the frequent coevolution of plants with host-specific pollinators diminishes the probability that an obligate outcrossing species will ever reproduce in a new habitat. The probability of reproductive failure is heightened by the dioecious biology of many tropical species, which requires that both male and female individuals be introduced (Baker and others 1983). Two examples of the problem are the Yoruba plants *atâre* and *órógbó* (*Garcinia kola*). The seeds of these species have served as articles of trade between Africa and Bahia for more than a century. In spite of numerous attempts at cultivation, they have yet to yield fruit in the New World. Consequently *órógbó* and *atâre* are still smuggled into Salvador from Nigeria for use in Candomblé worship.

Reproductive biology is less a constraint to the introduction of vegetatively reproducing plants. Several species, including *espada de Ogun* (*Sansevieria zeylandica*), *pèrégún* (*Dracaena fragrans*), and *ákòkó* (*Newbouldia laevis*), have been successfully introduced from the Old World and continue to serve similar purposes in Africa and Bahia. Among these, *ákòkó* is the best candidate for a species purposely introduced for religious purposes. Known in Bahia exclusively by its Yoruba name, this small tree appears to occur only in its native West Africa and in Bahia, where it is easily propagated by cuttings. In both locations it is often used as living fence (Burkhill 1985, 259–262). In the 1940s it appears that only one or two guarded specimens existed in Bahian terreiros. To make the sacred plants more widely available, the French anthropologist Pierre Verger (1988) imported and distributed several cuttings to Candomblé houses. Widely dispersed now, *ákòkó* is counted among the ethnoflora of most Bahian terreiros.

Although slaves were unlikely transatlantic vectors, African freedmen may well have participated in this exchange. Because of the Bahian slave revolts in the early nineteenth century, white Brazilians made considerable effort to repatriate African-born slaves, who in general proved less manageable and less willing to adopt Portuguese ways. Several cases exist in which Bahian freed men and women returned to Africa, spent a period studying Yoruba religion, and then went back to Salvador to establish the first official houses of Candomblé worship (Verger 1987, 530–533). Part of the mythology associated with these long-established terreiros is that the early Yoruba followers returned with some of the plants necessary for the rites.

The kola nut (*Cola acuminata*) represents the best evidence of purposeful introduction for religious use. Known as *obí* in Yorubaland and in Bahia, the seeds of this species appear to be indispensable to certain initiation rites. Several letters written by repatriated Africans referred to the active mid-nineteenth-century trade in Yoruba religious items between Ajuda, Dahomey, and Salvador. On 21 November 1862, a former slave, José Francisco dos Santos, reported, "I am remitting by Packet Santa Isabel . . . ten volumes containing roughly 40,000 kola nuts." On 1 August 1863, he wrote, ". . . Tell him that 71,500 kola nuts were sent" (Verger 1952). From Angola, the Austrian botanist Friedrich Welwitsch (1965, 320) reported on a lucrative trans-Atlantic trade in *obí*, the seeds of which were ". . . much sought out by the slaves introduced from Africa." This African shrub is now cultivated throughout Bahia specifically for Candomblé worship.

Several Yoruba liturgical species were intentionally introduced by sixteenth-century Bahian landowners. Long before the discovery of the New World, Spain and Portugal shared many nonfood cultivars with Africa and Asia. Species that served as spices or medicinal plants in Europe were concurrently components in the Yoruba spiritual flora. Eager to test the viability of their Old World agrosystem in a new setting, early Portuguese colonists experimented with dozens of familiar taxa in New World gardens. For example, as early as 1587, the Bahian plantation owner Gabriel Soares de Sousa reported on the horticultural success of *Ocimum basilicum*, *Mentha pulegium*, and *Plantago major* (Sousa 1971, 169–172). Yoruba medicine men, who arrived several centuries later, learned that several elements of their pharmacopoeia had preceded them to Brazil.

The factor that best characterizes these Old World invaders is that they are weeds. Many, like *salsa da praia* (*Ipomea pes-caprae*), have the innate ability to disperse and colonize new territory without purposeful intervention (Holm and others 1979; Sauer 1988). Sixty-three percent of the plants identified maintain a weedy life history, and many are noxious pests that have attained pantropical distributions. According to botanist K. F. P. von Martius (1843), many of these Old World weeds were dispersed and used medicinally in Brazil by the late 1700s. With a few notable exceptions, most of them probably arrived inadvertently during the slave trade. Mixed with the bedding straw on slave ships, the seeds of weedy African species were most likely introduced at the ports where slaves were unloaded (Parsons 1972). This explanation is especially tenable considering the tremendous volume of slave ships dropping anchor off the coast of Bahia. From the sixteenth to the nineteenth century, more slaves arrived in Salvador than at any other New World port. Although Portugal had agreed to limit slave activities to south of the equator, direct commercial exchange of Bahian tobacco for African captives thrived between Dahomey and Salvador until mid-nineteenth century. With almost 250,000 slaves arriving in Bahia between 1811 and 1851, the probability of accidental weed introduction would have been high (Eltis 1987).

This transatlantic floral conduit, intentional and unintentional, also functioned in the direction of Africa. Among the Candomblé species of New World origin, 45 percent have become naturalized in West Africa and incorporated into Yoruba medicine. Many were introduced for their food and fiber qualities, for example, papaya, manioc, avocado, and cotton (Ficalho 1947). Other species have no apparent use except as medicinal or liturgical plants. These include *Sida rhombifolia*, *Petiveria tetrandra*, and *Solanum paniculatum*, all of which have similar spiritual functions in West Africa and Bahia. This infusion of New World plants into Yoruban ceremonies and the resultant expansion of their ethnobotanical complex illustrate the flexibility of this magico-religion to change, a feature that evidently facilitated the process of species substitution in the New World.

PLANT SUBSTITUTION

Yoruba and Candomblé practitioners retain a similar system of folk biological taxonomy (Buckley 1985, 33–48). Species are associated with one or more orixás, and each is classified according to shared characteristics: morphological, geographical, and, most important, sensory. Because any herbaceous taxon with bitter-tasting leaves, for example, is thought to have an equal effect on a medical or spiritual disorder, several often distantly related species will be used identically and will retain the same name. In Nigeria, *patanmó* refers to several species that fold their leaf structures. Species include *Mimosa asperata* and *Mimosa pudica* in the Mimosaceae family and *Byophytum petersianum* in the Oxalidaceae family (Vergier 1976–77, 253). Moreover, with the possible exception of the twenty-one sacred leaves, the power of a plant prescription is not so much a function of its physiological effects as of the strength of its accompanying incantation. Numerous species can be employed to treat a spiritual problem, if the proper incantation is recited. This ethnobotanical plasticity surely established the framework in which recently arrived Africans could substitute New World species for those left behind.

The biogeographical similarity of West Africa and eastern Brazil would have further simplified the process of substitution. Both regions sustain wet and dry tropical forests with similar physiognomies. The process of convergent evolution, operating at opposite sides of the Atlantic, thus generated morphologically similar candidates for the replacement process. Additionally, given that they shared many floristic elements before the Cretaceous plate division, these two distant biogeographical provinces have many plant families and even genera as part of their common tropical flora. Some of the genera, including *Bauhinia*, *Kalanchöe*, *Vernonia*, and *Peperomia*, provided recently arrived Yoruba shamans not only with like-appearing candidates for substitution but also with phylogenetically closely related species.

The sacred iroko tree, in which the orixá of the same name resides, is an example of this process. In Yorubaland and in Bahia, the iroko serves as a focal point for devotional ceremonies. Candomblé and Yoruba superstition

dictates that the iroko should not be cut with an axe and should not be burned. In Nigeria and Benin this deity resides in the native African *Chlorophora excelsa*, a gigantic, buttressed tree in the Moraceae family. Long-lived and dioecious, the African iroko must have been an especially poor candidate for introduction (Dalziel 1948, 444-445). Responding to the absence of this important species, Bahian babalorixás long ago substituted the native *Ficus doliaria*, also in the Moraceae family. Like its African counterpart, this New World iroko is readily identified by its proximity to holy locations and by the spiritual offerings placed in the niches of its buttress (Fig. 4).

Other substitutions included the African *àlùmón* (*Vernonia senegalensis*), which in Bahia became *alumá* (*Vernonia bahiensis*). Another involved the widely dispersed genus *Kalanchoë*. In Africa, Yoruban babalawos use the succulent, herbaceous leaves of *òdúndún* (*K. crenata*), whereas Candomblé babalorixás have substituted the morphologically similar *folha da costa* (*K. brasiliensis*), also known as *òdúndún*. Interestingly, the Portuguese term *folha da costa*, or leaf of the coast, suggests to Bahians that this species or a similar one is also used in Africa. In referring to of-the-coast plants, two of my informants stated that Africans have them. The coast in these cases refers to the coast of Africa.

PERSISTENCE OF CANDOMBLÉ

The persistence of Candomblé testifies to the conscious effort of an oppressed people to resist total cultural assimilation. Viewed as one dimension of the master-and-slave conflict, the struggle to retain a belief system represented a spiritual offensive in the large arena of resistance to the slave society. Open rebellions, like the slave uprisings of the early nineteenth century, were forcefully crushed, and Afro-Brazilians to this day have failed to achieve social and economic equality. By contrast, the struggle was largely successful in terms of spiritual power. Rather than the humble, degraded descendants of slaves, Afro-Brazilians have retained an uncommon sense of pride and dignity in their African lineage.

The successful diffusion of Yoruba religion was facilitated by the adoptive environment in colonial Bahia. Ironically one important element included the inhumane treatment of African captives in Brazil. Underfed and overworked, African laborers experienced extreme levels of mortality and, unlike their North American counterparts, virtually failed to reproduce. In terms of costs and benefits, plantation masters perceived importation of new labor to be economically preferable to slave conservation and propagation (Marcilio 1984). That attitude accounts in part for the pressure to continue slave importation into the nineteenth century and inadvertently served to maintain a viable cultural link between Brazilian slaves and the traditions of their homelands.

Although large numbers of slaves were imported from Angola, the Congo, and the Guinea and Mina coasts, the chief source area for the last Bahian



FIG. 4—Buttress of the iroko at the terreiro Casa de Mãe de Menininha do Cantoá, Bahia.

slave cycle, which was from the late eighteenth century to mid-nineteenth century, was predominantly Yorubaland. The volume of slave traffic during that period numbered more than 6,000 persons a year. Yoruban captives came to dominate the urban landscape in Salvador not only numerically but also culturally (Rodrigues 1977, 215–217). Many of the slaves came from well-tutored, upper-class Yoruban families; included among them were priests, mediums, and healers, some of whom were afforded much respect by other slaves and, in a few instances, even by slave owners. These captives may have inspired a continued sense of loyalty to African traditions.

Urban slaves and freedmen residing in Salvador were actively encouraged to participate in ethnically related brotherhoods. These fraternal organizations, sanctioned by the Portuguese crown and after independence by the Brazilian government, became evidence of the successful conversion of African pagans to Roman Catholicism. But contrary to royal intentions, the organizations created the structure in which Africans could preserve their regional customs and traditions (Russell-Wood 1982, 128–160). Some of the organizations, like The Lady of Our Good Death, still exist. Others evolved into the initial houses of Candomblé worship.

As was true for most of Latin America, Roman Catholicism was the state religion. Pagan belief systems were not enfranchised by the crown, and their expression by act and deed were nominally subject to the laws of the inquisition. In contrast with practice in the Spanish colonies, rules against such practices were seldom rigidly enforced in Brazil. In some cases, the simple

act of substituting the name of a Roman Catholic saint for an African deity was sufficient to permit the continuation of African religious ceremonies (Bastide 1971, 91–95; Verger 1981, 9–13). However satisfying to the church authorities, this apparent syncretism, pagan and Roman Catholic, was superficial. The name changes were effected simply to deceive the white majority. In almost every way, the orixás survived as African gods.

In addition to these social and political factors, the physical environment into which the slaves came played a role in the survival of their belief system. The practice of Yoruba religion is firmly rooted in African ethnobotany. Whereas reliance on floristic healing has declined in other neo-African religions, plant use remains fundamental to Candomblé. Given that the social rank of holy men is determined in large measure by their success as spiritual and medicinal healers, it follows that the successful diffusion of their belief system was directly related to their ability to resettle the African ethnobotanical complex.

On arrival in the New World, Yoruban religious leaders found themselves in a totally alien cultural environment. However, much of the physical landscape must have seemed familiar—broadleaf evergreen forests interrupted by urban and agricultural areas. In the forests, convergent evolution and taxonomic similarity produced a wealth of candidates for substitution. This process of species replacement, in turn, was facilitated by the Yoruban biological system of classification, which stressed sensory attributes like taste and smell as opposed to floral characteristics.

Moreover, the tenacity with which alien weeds successfully colonized the increasingly disturbed landscape created a direct botanical link between the Old and New Worlds. The inadvertent diffusion of sacred Yoruban leaves paralleled the arrival of the people who had long used them. Accidental introductions were, in turn, supplemented by the intentional importation of preferred plants by colonists and repatriated freedmen. Ultimately, by incorporating Old and New World species into their ethnoflora, practitioners of the faith retained a measure of their religious power in the emerging Afro-Brazilian community.

REFERENCES

- Baker, H. G., K. S. Bawa, G. W. Frankie, and P. A. Opler. 1983. Reproductive biology of plants in tropical forests. *Ecosystems of the world: Tropical rain forest ecosystems: Structure and function*, ed. F. B. Golley, 184–244. Amsterdam: Elsevier Scientific.
- Bastide, R. 1971. African civilizations in the New World. New York: Harper and Row.
- Braga, J. 1988. *O jogo de búzios: Um estudo de adivinação no Candomblé*. São Paulo: Editora Brasiliensis.
- Brown, D., and M. Bick. 1987. Religion, class, and context: Continuities and discontinuities in Brazilian umbanda. *American Ethnologist* 14:73–93.
- Buckley, A. 1985. *Yoruba medicine*. Oxford: Clarendon Press.
- Burkhill, H. M. 1985. *Useful plants of west tropical Africa*, vol. 1, families A–D. Kew: Royal Botanical Gardens.
- Carneiro, E. 1961. *Candomblés da Bahia*. Rio de Janeiro: Conquista.
- Conrad, R. E. 1983. *Children of God's fire: A documentary history of black slavery in Brazil*. Princeton: Princeton University Press.

- Costa Lima, V. 1963. Notas sobre uma farmacopeia Africana. Diária de notícias (Salvador), 3 November.
- Dalziel, J. M. 1948. Useful plants of west tropical Africa. London: Crown Agents for the Colonies.
- Durodola, J. I. 1986. Scientific insights into Yoruba traditional medicine. New York: Trado-Medic Books.
- Eltis, D. 1987. Nineteenth-century transatlantic slave trade: An annual time series of imports into the Americas broken down by region. *Hispanic American Historical Review* 67:110-138.
- Ficalho, F. M. 1947. Plantas úteis da Africa Portuguesa. Lisbon: Divisões de Publicações e Biblioteca, Agência Geral das Colônias.
- Fichte, H. 1976. Xango: Die Afroamerikanischen religionen. Frankfurt: S. Fischer.
- Figueiredo, N. 1983. Banhos, cheiros, ariaches e amacis. *Caderns de Folclore* 33.
- Filho, L. V. 1946. O negro na Bahia. Rio de Janeiro: José Olímpio Editora.
- Gouvea, A. 1977. Folclore, religião, e medicina: Aspectos da medicina popular. Salvador: n.p.
- Heywood, V. H. 1978. Flowering plants of the world. Oxford: Oxford University Press.
- Holm, L., J. V. Pancho, J. P. Herberger, and D. Plucknett. 1979. Geographical atlas of world weeds. New York: John Wiley and Sons.
- Inventário da plantas medicinais do estado da Bahia. 1979. Salvador: Secretaria de Planejamento Ciência e Tecnologia.
- Jackson, B. D. 1895. Index Kewensis: An enumeration of the genera and species of flowering plants. London: Oxford University Press.
- Marcilio, M. L. 1984. Population of colonial Brazil. Cambridge history of Latin America II, ed. L. Bethell, 37-63. Cambridge, U.K.: Cambridge University Press.
- Martius, K. F. P. von. 1843. Systema materiae medicae vegetabilis Brasiliensis. Leipzig: F. Fleischer.
- Meek, J. C. K. 1931. Sudanese kingdom: An ethnographical study of the Jukun-speaking peoples of Nigeria. London: Kegan Paul, Trench, Trubneer.
- Parsons, J. 1972. Spread of African pasture grasses to the American tropics. *Journal of Range Management* 25:12-17.
- Rodrigues, N. 1977 [1905]. Os Africanos no Brasil. São Paulo: Companhia Editora Nacional.
- Russell-Wood, A. J. R. 1982. Black man in slavery and freedom in colonial Brazil. New York: St. Martin's Press.
- Sauer, J. D. 1988. Plant migration: The dynamics of geographical patterning in seed plant species. Berkeley: University of California Press.
- Silva, L. A., G. Lisboa, and T. Santos. 1982. Nomenclatura vulgar e científica de plantas encontradas na região cacauera da Bahia. Centro de Pesquisas do Cacau boletim tecnico no. 35. Itabuna, Bahia.
- Sousa, G. S. de. 1971. Tratado descritivo do Brasil em 1587, 4th ed. São Paulo: Companhia Editora Nacional.
- Verger, P. 1952. Cartas de um Brasileiro estabelecido no século XIX na Costa dos Escravos. *Anhembi* 6:212-251.
- . 1967. Awon ewe osanyin: Yoruba medicinal leaves. Ife: Institute of African Studies.
- . 1976-77. Use of plants in traditional medicine and its linguistic approach. Seminar series no. 1, part 1, 242-297. Ife: University of Ife.
- . 1981. Orixás. São Paulo: Corrupio.
- . 1987. Fluxo e refluxo do tráfico de escravos entre o Golfo de Benin e a Bahia de todos os santos. São Paulo: Corrupio.
- . 1988. Personal communication to author.
- Welwitsch, F. 1965. Amostras de drogas medicinais de plantas filamentosas e tecidos e de várias outros objetos, marmente etnográficos, coligidos em Angola, 1862. Colectania de escritos doutrinares, florísticas e fitogeograficos de Frederico Welwitsch concernentes principalmente a flora de Angola. Lisbon: Agência Geral dos Colônias.
- Willis, J. C. 1973. Dictionary of flowering plants, 8th ed. Cambridge, U.K.: Cambridge University Press.