Migration and Ethnobotanical Practices: The Case of *Tifey* Among Haitian Immigrants in Cuba

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Abstract Ethnobotanical knowledge and practices are dynamic and they change as they are transferred and appropriated by people who are adapting to new surroundings and changing environments. Using tifey, a multispecies drink, as a case study, we discuss the changes that emigration brought about related to tifey, and the processes that determined these changes. Tifey is a Haitian drink prepared by soaking Artemisia absinthium and other plants in rum or aguardiente. It probably had its origin in the adoption of the absinthe-based liquor used by French settlers and troops during the colonial period. Haitians progressively added culturally relevant flavorings and medicinal plants to this drink, and differentiated its production and use for medicinal, medicinal food, ritual (religious and social), and economic purposes. When Haitians migrated to Cuba, they brought tifey with them, but over the course of the twentieth century its use declined and its composition changed due to sociocultural factors such as the dissolution of Haitian settlements, and to ecological factors such as difficulty in cultivation and/or procurement of A. absinthium in the new environment.

Keywords Ethnobotany · Medicinal plants · Migration · Haiti · Cuba · *Artemisia absinthium* · Tifey

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Introduction

Traditional ethnobotanical knowledge may be defined as a cumulative body of knowledge, practices, and beliefs about the relationships between people and plants, which evolves as a function of adaptive processes and is handed down through generations by cultural transmission (Ford 1994; Turner 1995; Ellen 2000; Nesheim *et al.* 2006). Ethnobotanical knowledge is dynamic for any given culture and it changes as it is transferred and appropriated by people who are adapting to new surroundings and changing environments (Lee *et al.* 2001; Ososki *et al.* 2007). Studying cultural variations in ethnobotanical knowledge can help researchers to understand the complexities and dynamics of plant knowledge and practices, and to gain insights into cultural change (Reyes-Garcia *et al.* 2005; Ososki *et al.* 2007).

Due to the large increase in the scale of migration globally during the past few decades, scholars have paid increasing attention to the process of migration and related cultural issues from an ethnobotanical perspective (Greenberg 2003; Pieroni *et al.* 2005; Nesheim *et al.* 2006; Waldstein 2006; Pieroni and Vandebroek 2007). Indeed, researchers often focus on ethnobotanical knowledge and practices at one point in time, usually the present, whereas less attention has been given to the drivers of change over time and with migration of the original users, although migration is widely acknowledged as one of the principle means by which plant genetic material and associated knowledge and practices are diffused across the globe (Niñez 1987; Carney 2001; Carrier 2007).

In this paper we explore the ways in which ethnobotanical practices change with emigration and cultural integration using tifey—a Haitian drink—as a case study. Haitian migrants introduced tifey into Cuba in the first decades of the twentieth century. We present and discuss data about:



(1) the herbal composition, production, and uses of tifey; (2) historical, sociocultural, and ecological dimensions of tifey use, and (3) changes in related practices brought about by emigration and cultural integration.

The preparation of medicinal food spirits by soaking different plant species in an alcohol substrate is reported in different regions of the world, especially in Europe (Ballester *et al.* 1989; Agelet and Vallès 2001) and also in the Caribbean (Longuefosse and Nossin 1996). Wines and liquors with high alcohol content dissolve the active compounds of the plants macerated in them, and have been extensively used in popular medicine as extraction agents (Pardo de Santayana *et al.* 2006). These multiherbal drinks often represent a means to store active compounds of culturally relevant medicinal plants. At the same time, their herbal composition, use, cultural relevance, transmission, and diffusion over time may well represent the socioeconomic and cultural dynamics that producers and users experienced (Volpato and Godínez 2004).

Historically, Caribbean populations are the product of migrations and of the legacy of the different ethnicities involved in the process of national identify formation (Laguerre 1987). Much Cuban ethnobiological knowledge arose from the merger of different cultural contributions mainly of African, Spanish, and Caribbean origin (Guanche 1983; Esquivel and Hammer 1992; Rivero de la Calle 1992; Núñez and González 1999; Sarmiento 2001; Volpato and Godínez 2004, 2006). Although little studied, the contribution of Caribbean migration to Cuban culture is relevant, especially with respect to Jamaican and Haitian immigrants. Among the peoples of African origin who settled in Cuba throughout the centuries, Haitians played an important role in shaping Cuban culture as it is today, and, after Spanish, Creole is the second most spoken language (Hurlich 1998).

Haitian migration to Cuba occurred in two phases. The first, known as the French and French-Haitian migration period, peaked in the late eighteenth and early nineteenth centuries, following the Haitian revolution in 1791 (Berenguer 1979). The total number of migrants has been estimated at around 30,000; many French-Haitian slaves accompanied the French to work in newly established coffee plantations (cafetales) in the eastern Cuban provinces (Guanche 1983; Portuondo 1992). By this means, several plants from more temperate climes were introduced (Roig 1965; Esquivel et al. 1990). The second and more relevant phase occurred between 1913-1930, when more than a half a million Haitians entered the country legally or illegally (Pérez de la Riva 1979; Guanche and Garcia 2000). Immigration was a key factor in the plans for economic reconstruction after the War of Independence against Spain, and West Indians entered Cuba to supply the cheap labor required to cut sugarcane (the so-called zafra). Haitians were concentrated in the sugarcane and coffee growing region of the former provinces of Oriente and Camagüey (Fig. 1) (Barrios 2002; Castañeda and Hodge n.d.). In the latter province, they mainly settled in almost totally Haitian communities such as Caidije and Guanamaca, where they were able to perpetuate their own culture, including the practice of *voodoo* religion and use of Creole (Pedro 1966; Guanche and Moreno 1988; James *et al.* 1998). Most Haitians were illiterate, crowded into barracks (*barracones*), paid a miserable salary, and compelled to hand over their savings to reimburse the cost of their passage (Guanche and Garcia 2000; Nevet and De la Rosa 2002). They relied heavily on homegardens, wild plants, and on traditional ethnobotanical knowledge and practices in order to survive.

In spite of the fact that ethnobotanical research in Cuba has been growing, especially over the past two decades, the ethnobotanical knowledge of Haitians in Cuba has not yet been investigated. Haitian immigrants brought knowledge about both wild and cultivated plants and introduced new species (e.g. *Arracacia xanthorrhiza* Bancr., Apiaceae) (Esquivel and Hammer 1992), ultimately contributing to the development of Cuban food and medicinal habits. This Haitian contribution is currently disappearing due to urbanization and modernization, although it remains in relatively isolated rural and mountainous communities and among the oldest Haitians from the migrations of the 1920s or their descendants.

Among the characteristic culinary and medicinal practices that Haitians brought to Cuba was a spirit called *tifey* (or *tifei*), which was produced by soaking different plant species in rum or *aguardiente* (called *tafiá* in Creole), with the aerial parts of *Artemisia absinthium* as the main herbal ingredient. The word 'tifey' comes from the French 'petite feuille' (small leaf) referring to the plant's morphology, and is the Creole name for *A. absinthium* as well as for the drink itself. Haitians also call *A. absinthium lapsent*, which is the creolization of the French 'absinthe'. Although tifey is



Fig. 1 Map of Cuba with the Province of Camagüey



sometimes cited as a typical Haitian drink in Cuba (Ametller Frómeta 2004; Zamora Céspedes 2004), little data has thus far been collected about its composition and use (James *et al.* 1998; Álvarez Ramos 2007).

The Study Site

The Province of Camagüey is located between 20°31′01″ and 22°29′00″ latitude north and 76°57′00″ longitude west from Greenwich, in the centre-east of Cuba. It is the largest Cuban province, corresponding to 14.3% of the nation's territory (Fig. 1). The Province is inhabited by around 780,000 people, or 7% of the Cuban population. About 75% of the inhabitants live in urban areas, where Camagüey, Florida, and Nuevitas are the major cities. About 40% of the total population of the Province lives in the city of Camagüey; almost 200,000 people live in rural areas.

Materials and Methods

The data presented in this paper are derived from a wider study of the ethnobiological knowledge of Haitian people living in the Province of Camagüey. Fieldwork was carried out from December 2002–March 2003 and from February–July 2004. Semistructured and retrospective interviews were conducted with 24 Haitians (15 women and nine men) aged 60 to 102 years (mean age 84), in the following communities: Central Brasil, Jiquí, Aguacate, Esmeralda, Antón, Batey Varela (Antón), San Serapio, Caidije, La Jagua, Macuto 2, Camagüey (neighbourhoods of Puerto Príncipe, Bellavista, Florat, and La Guernica).

To locate the respondents, we first focused on the areas in the Province where historical and oral records indicated the presence of Haitian communities (e.g. around Central Brasil, Minas in the north of the Province and, of course, Central Haiti in the south). Once in the field, we asked doctors or nurses from the local hospital to help locate possible informants. Respondents in the city of Camagüey were located through the local Haitian Association. Interviews were conducted in Spanish, and informed consent was obtained verbally after giving an explanation of the methodology and aims of the study, and prior to interviewing. Throughout the field study, the ethical guidelines adopted by the American Anthropological Association (AAA 1998) were followed.

Among the Haitians interviewed, 18 migrated to Cuba between 1913–1926, four are the offspring of Haitian couples who entered Cuba during the same period, and two more left Haiti between 1946–1954. Seventeen are originally from the cities of Les Cayes (Creole name *Okai*) and Port Salut (Creole name *Posali*), in the South of Haiti,

whereas two lived 'near' Port-au-Prince. People who migrated in the 1920s generally sailed to eastern Cuba looking for jobs on the sugarcane plantations to improve their living conditions and support their families in Haiti. Those who arrived in the 1940s came mainly by plane, although they were migrating for the same reasons.

Most of those interviewed live in remote rural areas; because of their age, they often live alone since their spouses have died and their children, if any, have moved to major cities (e.g. Camagüey, La Habana). Some of those interviewed live in hospices either in Camagüey or in smaller towns and villages.

Plants cited as used in tifey production were identified following León (1946); León and Alain (1951, 1953, 1957); Alain (1964, 1974). Voucher specimens were deposited at the CIMAC herbarium in Camagüey (HACC).

The Species Used to Produce Tifey

There may be substantial variability in the combination of herbs used in multispecies preparations, which is determined by different driving forces that influence both the producers and the plants involved. At the same time, this variability is also the result of historical processes that influence producers and users, including cultural influences. In this section, we analyze and discuss tifey's herbal composition in relation to the cultural factors that have influenced the Haitian people in Cuba.

Results of fieldwork on the herbal composition of tifey are given in Table 1, arranged according to informants' consensus about the species used. For each plant, the botanical name and family, English name, Cuban and Haitian phytonyms (as collected from the informants when given), part used, specific medicinal properties attributed to the drink, and number of individual citations are given. A total of 33 plant species were reported to be used in tifey production, where consensus is high for *A. absinthium* (16 out of 21 informants who reported a recipe), *Cinnamomum verum* (11 informants), *Illicium verum* (9 informants), and *Zingiber officinale* (8 informants).

A. absinthium is a well-known fragrant perennial herb native to Europe that has been used as medicine since antiquity (Deans and Kennedy 2002). Nowadays, it is cultivated throughout the world for medicinal, ritual, and ornamental purposes, and is well known for its bitterness and anthelmintic properties (Guarrera 1999). It was introduced to and is naturalized in many parts of the Americas where it is still used today (Longuefosse and Nossin 1996; Di Stasi et al. 2002), including Haiti (Weniger et al. 1982). It is likely that A. absinthium was introduced to Cuba by the Spanish during the early colonial period, or by French-Haitian immigrants in the late eighteenth century. In either



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Malvaceae rtt Zingiberaceae Solanaceae Caricaceae	Not reported/Bwa panakó, tuapalakó	se (seven)	Vomitive
Zingiberaceae Solanaceae Caricaceae	Quimbombó/Kalalou	se (seven or twenty-one)	Aphrodisiac
Solanaceae Caricaceae	Colonia/Fey canel	le (one)	Catarrh, colds, fever
Solanaceae Caricaceae			
Caricaceae		fr	
	Papaya, fruta bomba/Papay	ro	Diuretic
Morinda royoc L. Rubiaceae Redgal	þ	ro	Diuretic, tonic
Ocimum basilicum L. Lamiaceae Basil	Albahaca blanca/Bazilik	ap	Stomachic
	Not reported/Rakèt	fr	
Phoradendron gracile Trel. Viscaceae Quacimmila de canario	Palo caballero/Uàuà	LO CI	Aphrodisiac
Solanum americanum Mill. Solanaceae American black nightshade	Yerba mora/Lamá	ro	Stomachic

ba, bark, ep fruit epicarp, fr fruits, le leaves, rh rhizome, ro root/tuber, st stems, wo wood, Cit. citations (number of individual reports for each species)



case, it is reported that it was cultivated around 1800 (Fernández *et al.* 1990). Nevertheless, its use among the Cuban population has never been widespread, but has been mainly limited to people of French and Haitian origin.

A. absinthium is a very important plant in the traditional medicine of Haitians in Cuba. They regard it as a precious stomachic, anthelmintic, and aphrodisiac. The medicinal effect can be achieved either by drinking an infusion of the aerial parts or by drinking a small glass of the spirit every morning. The habit of preparing and drinking an A. absinthium-based liquor like tifey was in all likelihood a cultural inheritance from the French colonialists and it is quite diffused throughout former French colonies (Conrad 1988; Longuefosse and Nossin 1996). In fact, even if the use of alcoholic beverages prepared with A. absinthium dates back to antiquity (Arnold 1989), the drink known as absinthe was created in French-speaking Switzerland in the late eighteenth century through alcoholic maceration and distillation of A. absinthium along with other flavoring herbs. In the late nineteenth century, and until its controversial prohibition in most Western countries between the first and the second decades of the twentieth century, absinthe was the most popular spirit in Europe due to its purported stimulant, aphrodisiac and healing properties (Conrad 1988). Absinthe was also used by French troops as a prophylaxis against various diseases (such as malaria and helminthiasis) (Adams 2003). Characteristics that are common to both absinthe and tifey are: A. absinthium is the main ingredient, other flavoring herbs are included, the drink is prepared by macerating plant parts in alcohol, and it is used for medicinal purposes, especially as a vermifuge.

C. verum, *Z. officinale*, and *Myristica fragrans* are used as the main flavoring agents in tifey, and are highly valued and frequently used by Haitians in Cuba. Like *I. verum*, they are used to lend additional flavors to the spirit, are considered 'hot' plants with tonic and stomachic properties, and are also used to treat colds and related respiratory afflictions.

Other plants added to tifey for their stomachic and flavoring properties are *Mentha spicata* and *Lippia alba*, cited by four informants each. The latter especially is known to have been cultivated and widely used around the *cafetales* where French-Haitian migrants were employed in the eastern part of Cuba, where it was always found in the "slavery walls" (*muros de la esclavitud*) between the ruins of houses and barracks on coffee plantations (Hernández, personal communication).

The roots of Erythroxylum havanense, Chiococca alba, Roystonea regia, and Cocos nucifera are reported to be added to tifey mainly for their anticatarrhal, diuretic, and aphrodisiac properties. They are among the main components of complex medicinal preparations called galones or botellas in Cuba (Hernández and Volpato 2004), and are important medicinal and ritualistic plants in Afro-Cuban

religions (Fuentes 1992). Their use in tifev indicates a shared knowledge which is almost certainly based on the original African-Haitian culture. The same cultural origin may be ascribed to the use of other root components of tifey, such as Stachytarpheta jamaicensis, Phoradendron gracile, Morinda royoc, Carica papaya, and Solanum americanum, as well as the stems of Allophylus cominia and the bark of Caesalpinia vesicaria. The roots and ligneous part of these and other species pertaining to Afro-Caribbean traditional medicine are often used for their purported antimicrobial and antibacterial properties: in galones they are used mainly to treat venereal diseases and respiratory infections (Hernández and Volpato 2004). Roots play an important role and are considered as the "strongest" part of the plant in traditional Caribbean knowledge, where Afro-American healers are often called "root doctors" (Cabrera 1954; Laguerre 1987). In Afro-Cuban religion, these preparations are often prepared by 'santeros' according to secret formulas, and are both a medicinal and a spiritual remedy (Brandon 1991). The use of these plants in tifey provides magical protection against evil entities as well as medicinal properties. In fact, Haitians often consider illness to be a consequence of the anger of a Loa (spirit) (Weniger et al. 1982), and the addition of religious plants to the drink can be regarded as an offer to the Loa in order to pacify them.

The leaves of *Cymbopogon citratus* were cited by three informants as a component of tifey, specifically for the treatment of colds. This plant often appears in the corpus of ethnobotanical knowledge of African origin in Cuba; it is also used as a febrifuge, and some Haitian informants reported that they drink an infusion of the plant every morning.

Two plants, Artemisia abrotanum and Origanum majorana, were each cited by two informants who designated them with the name 'tifey.' Consciously or not, they are used as substitutes of A. absinthium due to their common morphology (i.e. small leaves) and medicinal properties, at least for A. abrotanum. Other plants cited by only one informant are used according to a family tradition, for personal experimentation, or for their relevance in other cultural contexts. As examples, Abelmoschus esculentus was the characteristic staple food of Haitians in Cuba, and S. americanum was one of the most important medicinal plants, especially for stomachic purposes. Other products not of vegetal origin cited as ingredients of tifey were wax candles (cited by one informant as symbol of strength).

James et al. (1998), in a treatise about voodoo in Cuba, report that tifey is a drink obtained from the maceration of different plant parts in a glass bottle filled with sugarcane alcohol and is used in ritual ceremonies. The ingredients reported include the leaves of caña santa (Cymbopogon citratus) and pimienta bomba (Pimenta dioica), leaves of



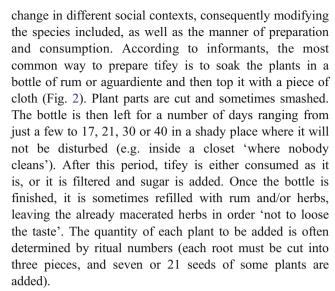
naranja (Citrus sinensis), canela (C. verum or Canella winterana (L.) Gaertn, Canellaceae), yerba carpintero (Justicia pectoralis Jacq., Acanthaceae), the roots of coco (Cocos nucifera), palma (Roystonea regia), jibá (Erythroxylum havanense), and of two more plants that were not identified, as well as the rhizome of raíz de China (Smilax domingensis Willd. or Smilax havanensis Jacq., Smilacaceae), the stem of bejuco indio (Gouania polygama (Jacq.) Urban or Gouania lupuloides (L.) Urban, Rhamnaceae), and roosters' spoors.

On the other hand, Álvarez Ramos (2007) reports that tifey is prepared with aniz estrellado (I. verum), canela (C. verum or Canella winterana), and albahaca blanca (Ocimum basilicum) by placing the bottle outside for three consecutive nights. For reasons that are addressed later, neither recipes include A. absinthium. While the latter recipe is likely to represent a basic formula, with O. basilicum substituting for A. absinthium, many of the plant ingredients used in the first recipe are the same as to those reported in this article, which provides further insights into the cultural composition of tifey. Not only does the recipe use hot and flavoring species typical of Afro-Haitian traditions, it also includes the same group of roots found in our data and in eastern Cuba galones (Hernández and Volpato 2004), as well as the main ingredients of pru (Gouania polygama, Smilax domingensis, and P. dioica), a traditional fermented drink of probable Haitian and/or Dominican origin (Volpato and Godínez 2004). It is likely that groups of culturally relevant plants are not only used in specific products, but are also used in an array of medicinal foods with different forms of preparation (decoction in galones vs. decoction and fermentation in pru vs. alcoholic maceration in tifey), with both medicinal and religious purposes. In fact, these kinds of multiherbal preparations allow producers to utilise the totality of their traditional ethnobotanical knowledge in order to create drinks with 'prodigious' medicinal effects (Ametller Frómeta 2004).

The species used in tifey production include groups of plants of different cultural origins, which are the result of historical events that forged Haitian cultural identity. It is likely that Haitians adopted the basic preparation introduced by the French (alcoholic maceration of *A. absinthium*) and progressively added to it culturally relevant flavorings and medicinal plants in accordance with its purpose. This process probably started in Haiti and continued after migration to Cuba as a response to social and ecological pressures which led to further changes in the tifey recipe, as is seen below.

Preparation, Consumption, and Uses

Another factor determining variation in tifey herbal composition is the purpose it is made for, which may



The drink is considered to have different medicinal properties depending upon the different combinations of plants used in its production. For example, in order to prepare tifey with strong aphrodisiac properties, seeds of *Abelmoschus esculentus* and *P. dioica* are added, while the roots of *Erythroxylum havanense* and *Carica papaya*, and the bark of *Caesalpinia vesicaria* lend strong diuretic properties, and the leaves of *Cymbopogon citratus* and of



Fig. 2 Haitian woman with a bottle of tifey



Alpinia zerumbet will enhance its effectiveness against colds.

Haitians in Cuba used tifey in variety of contexts: as a medicine and tonic, as a work aid, as a tribute to guests, in religious rituals, and to generate income. The drink is generally served in small glasses. One informant reported that drinking tifey from the bottle causes its medicinal properties to disappear, a belief that might help to avoid excessive consumption and encourage rational use. A small glass of tifey is consumed before breakfast (on an empty stomach) as an aphrodisiac and tonic for men. Informants stated that, 'by drinking a small glass of tifey every morning, Haitian men have sons until they are very old.' As a strong vermifuge and a remedy for stomach pains, the main medicinal properties are derived from A. absinthium. One small glass in the morning and another in the afternoon are taken to treat catarrh, colds, and respiratory afflictions in general. It is also used as digestive and diuretic and as a remedy for 'histerico', an illness of nervous origin which causes 'a jump in the stomach.'

In the province of Camaguey, at least until the 1960s, when major social changes due to the Cuban Revolution in 1959 occurred, Haitian women produced tifey at home in order to contribute to the health of their families, to uphold social and religious rules and rituals, and to contribute to household income. They sold tifey in small glasses to the sugarcane plantation workers especially during the harvest period (zafra). Children sometimes helped with sales. The tifey produced for sugarcane workers in most cases is based on a simple formula containing A. absinthium along with two or three 'hot' flavoring plants (e.g. I. verum, C. verum), whereas tifey produced for medicinal purposes is based on a wide variety of recipes. A glass of tifey was commonly offered to guests and Haitians celebrated social events and religious festivities with the drink (e.g. Santa Barbara or Changó the fourth and San Lazaro the seventeenth of December). Tifey was given to every participant in voodoo ceremonies to protect them, and notably to the main officiator to stimulate the 'bajada del santo' (the descent of the saint), i.e. the trance. For this purpose flowers of Datura stramonium were sometimes added. As is shown below, emigration and the progressive integration of Haitians into Cuban mainstream society progressively led to the decline in or abandonment of some of the uses of tifey and of the plant species related to those uses, and to changes in its composition and cultural significance.

Sociocultural and Ecological Issues in Tifey-related Practices After Emigration

An understanding of the historical origins and development of tifey-related practices within Haiti helps to highlight the changes that emigration to Cuba brought about in its composition and uses. There is little data in the literature that would help to reconstruct the origins and historical development of tifey, and none was found to corroborate its past or present use in Haiti. Nevertheless, interviews with informants strongly indicate its production and use in Haiti before migration, as well as the introduction into Cuba of dried aerial parts and/or fresh plants of *A. absinthium* by the same migrants. Given the fact the most of the migrants to Cuba between 1913-1930 came from the south-western parts of Haiti, it is also possible that tifey production was not a country-wide tradition but was only common in those areas.

After emigration, tifey was widely produced in Haitian settler communities called *bateys* around sugarcane and coffee fields. Plants were either cultivated in homegardens or collected from the wild. Homegardens allowed Haitians to maintain their culture by cultivating traditional food and medicinal plants. Wild plants were often collected in the 'monte' (a generic name for forests and non-cultivated areas that have a deep cultural and spiritual importance for Cubans who have African origins—see Cabrera 1954; Fuentes 1992), and in coffee and sugarcane fields. Also, migrants introduced important plants and plant products, such as *A. absinthium*. The presence of this plant or of dried specimens in the baggage of Haitian migrants, as reported by informants, testifies to its importance—and to tifey's importance—in Haitian culture.

Twenty informants said they were accustomed to consuming the drink, which was prepared at home, after emigrating to Cuba, and thirteen reported that they or their mothers also prepared the drink for sale to sugarcane workers (see Table 2). All of the informants who used to prepare or still prepare tifey at home said that they learnt this from their parents.

For Haitian migrants, tifey was not only a medicinal and ritual drink, but also part of their cultural identity that distinguished them from Cuban people. At least until the 1960s, Haitians occupied the lowest social strata in Cuban society, and were regarded by mainstream Cubans with both disdain and suspicion, mainly because of their 'magical practices' related to voodoo ceremonies. Tifey was an important food and medicine among Haitians, and one marker of a specific cultural identity both from the immigrants' perspective ('Haitians drink tifey') and from the perspective of the dominant Cuban culture ('tifey is *stuff* of Haitians').

Today, at least three generations after migration, tifey is still produced, albeit mostly by older Haitians, and eight informants (out of 20 that used to consume it) had a bottle of tifey at home at the time of the interview. Patterns of use, composition, and cultural significance have changed substantially, leading to its progressive disappearance from household stocks. Different social, cultural, and ecological pressures have contributed to this. Beginning in the 1960s,



Table 2 Informants' responses about tifey-related knowledge and past and present practices

	Number of informants ($N=24$) that		Out of these, number of informants that	
Traditional ethnobotanical	Know what tifey is and give a definition of it	24		,
knowledge	Give a recipe → Table 1	21	Give a recipe using Artemisia absinthium \rightarrow Table 1	16
Past ethnobotanical	Parents or respondents used home-prepared tifey	20	Had tifey prepared with Artemisia absinthium	15
practices	soon after emigration		Parents or respondents used to sell tifey	13
Present ethnobotanical	Use home-prepared tifey at the time of the	8	Have tifey prepared with Artemisia absinthium	4
practices	interview		Have Artemisia absinthium in the homegarden	2
			Sell tifey	0

Haitian communities began to dissolve due to factors such as changes in sugarcane production systems and the slow integration of Haitians into Cuban society (Espronceda 2001). This resulted in a generalized loss of traditional Haitian practices, which barely survived since they largely lost their social significance. Specifically, tifey production was no longer an income generating activity and its use in ritual and religious ceremonies declined sharply. Many Haitians stopped producing tifey at home, and second and third generation migrants no longer produced or consumed tifey once they moved out of their parents' household or migrated to another region of Cuba. Moreover, the suspicious and stereotypical images that dominant sectors of Cuban society had of Haitians and their practices led those Haitians who progressively integrated into Cuban society to abandon those cultural elements that distinguished them from Cubans. Within households, tifey's use is now mainly culinary rather than medicinal, which consequently has brought about changes in its composition. Trends include the increasing use of aromatic herbs and 'hot' plants, the decreasing use of medicinally specific plants and, more importantly, the decreasing use of A. absinthium as the main ingredient as a consequence of harvesting pressures on the species and of tifey's increasing use in a food context. Tifey made with A. absinthium is very bitter, and while bitterness is usually culturally accepted for medicinal remedies (Haitians say that 'medicine is bitter'), this characteristic becomes unwanted with the shift to food use. Nevertheless, the progressive elimination or substitution of A. absinthium in tifey production is likely to be due mainly to ecological factors affecting the availability and procurement of the species. Out of eight informants who had tifey at home at the time of the interview, only four used A. absinthium as the main ingredient, while two used Majorana hortensis, and two used A. abrotanum. Also, three used to keep macerated A. absinthium in the bottle, periodically refilling it with rum or aguardiente and 'hot' ingredients such as C. verum and Myrystica fragrans.

Of those informants who did not have tifey at home, eight said that the reason was that they could no longer obtain *A. absinthium*. Informants often reported that *A. absinthium* is very difficult to cultivate and has progressively disappeared

from homegardens and patios, whereas in the first decades after migration the plant was widely cultivated. Currently, only two informants (both belonging to the group that still prepares tifey) cultivated A. absinthium in their homegardens at the time of the interview (Fig. 3), in a context where almost all informants (22 out of 24) had a homegarden or at least some small piece of land cultivated with food and medicinal plants. A similar situation was found in Dominica, where people reported difficulties cultivating and propagating A. absinthium, and its use continues mainly due to the fact that dried plants are sold in shops in the capital city (Quinlan et al. 2002). In contrast, A. absinthium was not reported to be sold in medicinal plant markets or by yerberos (herb sellers) in studies carried out in Santiago de Cuba (Hernández 2000) and in Camagüey (Godínez and Volpato 2008). Out of those informants who still use A. absinthium to prepare tifey, two grow their own, while two others use stems from a plant owned by people they know. Two informants speculated that the plant might still be cultivated in Eastern Cuba, where most Haitian immigrants settled. Informants explained the difficulties in cultivating A. absinthium in Cuba and its disappearance from homegardens in cosmological terms, such as 'tifey is a plant that dries up if you look for it'. Also, people who collect stems from plants belonging to others are expected to leave a donation (mainly



Fig. 3 Haitian informant with Artemisia absinthium in his homegarden



coins) at its base to ensure that its medicinal properties will be effective.

Although Hammer et al. (1990) citing Fuentes (1988) reported that A. absinthium is frequently grown in Cuban homegardens as a condiment and medicinal plant, it is currently very difficult to find, at least in the province of Camagüey. Also, the plant is either absent or cited only causally in the most important treatises on Cuban folk medicine (Roig 1974; Seoane 1984) and in the ethnomedical studies in the Province of Camagüey (Beyra et al. 2004). Roig (1974) reports the plant as 'incienso ajenjo' and the European spirit as 'ajenjo', without mentioning tifey, and states that A. absinthium is less common in Cuban homegardens than A. abrotanum, called 'incienso'. We suspect that the cultivation of A. absinthium is not widespread but rather is restricted to people of Haitian and French-Haitian descent, especially in the eastern part of Cuba which received most of the migrants. Moreover, A. absinthium rarely flowers in climatic conditions of Cuba (Roig 1974; Rodríguez et al. 2003), and this could have affected the diffusion of its use among the Cuban population and its maintenance among Haitians.

In spite of the progressive abandonment of traditional ethnobotanical practices with the dissolution of Haitian communities in Cuba, the consequent decline in tifey relevance at household level, and the cultural and ecological pressures on tifey-related practices, there have been at least two different sociocultural processes that have preserved and diffused the use of tifey. The first is a process of social transmission between the generations of Haitians migrants. In fact, especially over the last few years, Haitians in Cuba have begun to rediscover their roots and revitalize their traditional culture by forming Haitian associations and celebrating festivals and other events. In this context, tifey is sometimes reconstituted as part of traditional Haitian practice. The rediscovery of tifey in sociocultural activities entails changes in its composition, where its ingredients are simplified and A. absinthium is absent (the recipe given by Alvarez Ramos 2007, is a typical example). The second is a process of diffusion of migrants' practices to the native population. In fact, some native Cubans who have adopted tifey preparation and use, refer to the drink as yerbita (small herb) (James et al. 1998). More specifically, Cubans who lived in contact with Haitian communities adopted the practice of steeping parts of plants in rum and redefined the drink by translating the original Creole name into Spanish.

Conclusions

Ethnobotanical research in the context of migration has been increasing especially over the past decade. However, most researchers have highlighted the conservation of migrants' ethnobotanical knowledge and practices in the new context, rather than the changes that emigration brought about and the processes that determined these changes. In fact, migrants often confront a very different sociocultural context where traditional practices may come under pressure and therefore may be progressively adapted or abandoned (Pieroni and Vandebroek 2007). New environments may mean that specific plants and plant products may no longer be easily available, so that different strategies have to be used to procure them or to find substitutes (Volpato *et al.* 2007). Also, culturally relevant preparations may represent a marker of migrant cultural identity, leading migrants to adapt their practices while maintaining their symbolic importance.

All of these processes can be addressed through specific case studies, and the use of tifey among Haitian immigrants in Cuba represents an interesting one. Haitians who migrated to Cuba settled mostly in immigrant communities where they maintained their traditional ethnobotanical practices, including the preparation and use of tifey. During the first decades after emigration, tifey appears to have been widely used and it represented a symbol of Haitian identity. However, the major changes in Cuba that began with the Socialist Revolution in 1959 led to the gradual dissolution of Haitian communities and Haitian integration into mainstream Cuban society. Especially starting with the second generation of migrants, the production and use of tifey progressively declined both at household level and as a social drink. At the same time, there were changes in tifey's composition, especially with regard to its main ingredient, A. absinthium. Strategies adopted by Haitian migrants to cope with the difficulties that arose in the procurement of this plant included, initially, obtaining it from Haiti, and later substituting it with similar plants that were more readily available in Cuba, as well as eliminating it from the recipe.

In spite of changes in both tifey's composition and patterns of use, the preparation and use of the drink survived the integration of Haitians into mainstream Cuban society through at least three different means: its maintenance by some Haitian households for medicinal and food purposes; its revitalization in Haitian festivals as a symbol of cultural identity; and its diffusion to part of the native Cuban population under the name of *yerbita*. After three generations and major social, economic, and cultural changes, tifey still represents a means for Haitians to express their cultural identity, as well as a contribution by Haitian migrants to Cuban ethnobotanical practices.

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