

Hum Ecol (2009) 37:43–53
DOI 10.1007/s10745-008-9211-4

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

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Published online: 13 December 2008

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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 tify; (2) historical, sociocultural, and ecological dimensions of tify 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 socio-economic 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 identity 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 climates 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 Guanamacá, where they were able to perpetuate their own culture, including the practice of *voodoo* religion and use of Creole (Pedro 1966; Guanache 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 (Guanache 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 *tify* (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 ‘tify’ 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 tify is



Fig. 1 Map of Cuba with the Province of Camagüey

sometimes cited as a typical Haitian drink in Cuba (Ametller Frómata 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 tify 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 Tify

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 tify'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 tify 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 tify 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

Table 1 Species used in the production of tify

Botanical taxon	Family	English name	Cuban/Haitian phytonyms	Part(s) used	Specific properties	Cit.
<i>Artemisia absinthium</i> L. 8617	Asteraceae	Absinthe, wormwood	Incienso ajenjo, altamisa/Tifey, labsént	ap	Aphrodisiac, strenghten men, intestinal parasites, stomachic	16
<i>Cinnamomum verum</i> J.S. Presl.	Lauraceae	Cinnamon	Canela/Kanèl	ba	Stomach pains, colds	11
<i>Illicium verum</i> Hook f	Illiciaceae	Star anise	Aniz estrellado/Ani etoilé	fr	Stomachic	9
<i>Zingiber officinale</i> Rosc.	Zingiberaceae	Ginger	Jengibre/Jenjían	rh	Catarrh, colds, tonic, digestive	8
<i>Myristica fragrans</i> Hoult.	Myristicaceae	Nutmeg	Nuez moscada/Mizká	se	Stomach pains, colds	5
<i>Citrus sinensis</i> (L.) Osbeck	Rutaceae	Orange	Naranja/Zoranj	ep		4
<i>Mentha spicata</i> L.	Lamiaceae	Spearmint	Yerba buena/Ti boum	ap	Stomachic, colds, influenza	4
<i>Lippia alba</i> (Mill.) N.E.Br.	Verbenaceae	Bushy matgrass	Menta/not reported	ap		4
<i>Cymbopogon citratus</i> Stapf 8290	Poaceae	Lemongrass	Calentura, cañasanta, yerba de limon/Sitwonèl	le	Colds, fever	3
<i>Erythroxylum havanense</i> Jacq. 8291	Erythroxylaceae	Wild cherry, lionwood	Jibá/not reported	ro	Expectorant, diuretic	3
<i>Allium sativum</i> L.	Liliaceae	Garlic	Ajo/Lay	bu peel with roots	Intestinal parasites	2
<i>Allophylus cominita</i> Sw. 8654	Sapindaceae		Palo caja, palo monte/Tuá padol	st	To take away the evil	2
<i>Artemisia abrotanum</i> L. 8623	Asteraceae	Southernwood	Altamisa/Tifey	ap	Intestinal parasites	2
<i>Chiococca alba</i> Hitchc. 8345	Rubiaceae	Snowberry	Bejuco verraco, palo verraco/not reported	ro	Aphrodisiac (not for pregnant women, would cause miscarriages)	2
<i>Datura stramonium</i> L.	Solanaceae	Jimsonweed	Chamico/Datira	fl	Hallucinogenic	2
<i>Pimenta dioica</i> (L.) Merr.	Myrtaceae	Allspice	Pimienta dulce, pimienta bomba/Pwa duz, pimá duz	fr	Stomachic	2
<i>Stachytarpheta jamaicensis</i> (L.) J. Vahl 8296	Verbenaceae	Light-blue snakeweed, rat's tail	Verbena/Vèven	ro		2
<i>Caesalpinia vesicaria</i> L. 8292	Fabaceae	Brazilwood	Brasilete/not reported	ba	Diuretic	2
<i>Chamissoa altissima</i> H.B. & K.	Amaranthaceae	False chaff flower	Not reported/Lyamm panye	le		2
<i>Cocos nucifera</i> L.	Arecaceae	Coconut palm	Coco/Kok	ro	Diuretic	2
<i>Origanum majorana</i> L. 8433	Lamiaceae	Sweet marjoram	Mejorana/Tifey	ap	Stomach pains	2
<i>Roystonea regia</i> (Kunth.) O.F. Cook	Arecaceae	Florida or Cuban royal palm	Palma real/not reported	ro	Diuretic	2
<i>Xylopiya aethiopica</i> A. Rich. n.d.	Annonaceae	Ethiopian pepper	Pimienta de Guinea/Pwa guiné	fr	Respiratory system afflictions	2
<i>Abelmoschus esculentus</i> Moench	Malvaceae	Okra	Not reported/Bwa panakó, tuapalakó	se (seven)	Vomitive	2
<i>Alpinia zerumbet</i> (Pers.) B.L. Burtt & R.M. Smith 8600	Zingiberaceae	Shellplant	Quimbombó/Katalou	se (seven or twenty-one)	Aphrodisiac	1
<i>Capsicum frutescens</i> L. 8277	Solanaceae	Chili pepper	Colonia/Fey canel	le (one)	Catarrh, colds, fever	1
<i>Carica papaya</i> L.	Caricaceae	Papaya	Aji picante/Pimá piqué	fr		1
<i>Morinda royoc</i> L.	Rubiaceae	Redgal	Papaya, fruta bomba/Papay	ro	Diuretic	1
<i>Ocimum basilicum</i> L.	Lamiaceae	Basil	Palo garañon/not reported	ro	Diuretic, tonic	1
<i>Opuntia ficus-indica</i> (L.) Mill.	Cactaceae	Indian fig	Albahaca blanca/Bazilik	ap	Stomachic	1
<i>Phoradendron gracile</i> Trel.	Viscaceae	Quacimmilla de canario	Not reported/Rakèt	fr		1
<i>Solanum americanum</i> Mill.	Solanaceae	American black nightshade	Palo caballero/Uaià	ro	Aphrodisiac	1
			Yerba mora/Lamá	ro	Stomachic	1

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 tifeý 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 tifeý 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 tifeý, 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 tifeý 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 tifeý 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 tifeý 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 tifeý, 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 tifeý 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 tifeý, 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 ‘tifeý.’ 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 tifeý were wax candles (cited by one informant as symbol of health and life) and pieces of deer horn (cited by one informant as symbol of strength).

James *et al.* (1998), in a treatise about voodoo in Cuba, report that tifeý 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' spoor.

On the other hand, Álvarez Ramos (2007) reports that tifeý is prepared with aníz 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 tifeý. 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 *tifeý*), 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 (Amettler Frómata 2004).

The species used in tifeý 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 tifeý recipe, as is seen below.

Preparation, Consumption, and Uses

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

change in different social contexts, consequently modifying the species included, as well as the manner of preparation and consumption. According to informants, the most common way to prepare tifeý is to soak the plants in a bottle of rum or aguardiente and then top it with a piece of cloth (Fig. 2). Plant parts are cut and sometimes smashed. The bottle is then left for a number of days ranging from just a few to 17, 21, 30 or 40 in a shady place where it will not be disturbed (e.g. inside a closet 'where nobody cleans'). After this period, tifeý is either consumed as it is, or it is filtered and sugar is added. Once the bottle is finished, it is sometimes refilled with rum and/or herbs, leaving the already macerated herbs in order 'not to loose the taste'. The quantity of each plant to be added is often determined by ritual numbers (each root must be cut into three pieces, and seven or 21 seeds of some plants are added).

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 tifeý 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 tifeý

Alpinia zerumbet will enhance its effectiveness against colds.

Haitians in Cuba used tifye 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 tifye 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 tifye is consumed before breakfast (on an empty stomach) as an aphrodisiac and tonic for men. Informants stated that, ‘by drinking a small glass of tifye 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 Camagüey, at least until the 1960s, when major social changes due to the Cuban Revolution in 1959 occurred, Haitian women produced tifye 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 tifye in small glasses to the sugarcane plantation workers especially during the harvest period (*zafra*). Children sometimes helped with sales. The tifye 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 tifye produced for medicinal purposes is based on a wide variety of recipes. A glass of tifye 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 Lázaro the seventeenth of December). Tifye 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 tifye and of the plant species related to those uses, and to changes in its composition and cultural significance.

Sociocultural and Ecological Issues in Tifye-related Practices After Emigration

An understanding of the historical origins and development of tifye-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 tifye, 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 tifye production was not a country-wide tradition but was only common in those areas.

After emigration, tifye 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 tifye’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 tifye at home said that they learnt this from their parents.

For Haitian migrants, tifye 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. Tifye was an important food and medicine among Haitians, and one marker of a specific cultural identity both from the immigrants’ perspective (‘Haitians drink tifye’) and from the perspective of the dominant Cuban culture (‘tifye is *stuff* of Haitians’).

Today, at least three generations after migration, tifye is still produced, albeit mostly by older Haitians, and eight informants (out of 20 that used to consume it) had a bottle of tifye 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 tify-related knowledge and past and present practices

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

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, tify production was no longer an income generating activity and its use in ritual and religious ceremonies declined sharply. Many Haitians stopped producing tify at home, and second and third generation migrants no longer produced or consumed tify 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, tify'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 tify's increasing use in a food context. Tify 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 tify production is likely to be due mainly to ecological factors affecting the availability and procurement of the species. Out of eight informants who had tify 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 *Myristica fragrans*.

Of those informants who did not have tify 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 tify) 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 tify, 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 'tify 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 ethno-medical 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 tifye, 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 tifye relevance at household level, and the cultural and ecological pressures on tifye-related practices, there have been at least two different sociocultural processes that have preserved and diffused the use of tifye. 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, tifye is sometimes reconstituted as part of traditional Haitian practice. The rediscovery of tifye 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 tifye 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 tifye 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 tifye. During the first decades after emigration, tifye 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 tifye progressively declined both at household level and as a social drink. At the same time, there were changes in tifye’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 tifye’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, tifye still represents a means for Haitians to express their cultural identity, as well as a contribution by Haitian migrants to Cuban ethnobotanical practices.

Acknowledgements Special thanks are due to all of the Haitian respondents and their families for their kindness and information, and especially to Anamaria Fiz, Antonia Vassel Ipolito, Antonio Gutierrez, Cecilia Rodriguez Gomez, Cecilio, Chichí, Edith Georges, Elifeto, Emma Lenzé Forestal[†], Ernesto Batista, Evelia, Fracilme Jean Luis,

Francisca Pérez Sinal, Graciela Francesa, Inolia, Joaquín Forestal, Juana Bertha Callejo, Lalita, Manolita, Margarita Perez, Miguel Tomás, Miguel Nevet, Rosa Ricardo Adams and Silvia Suri for agreeing to share their knowledge with us; to the members of the *Asociación de Haitianos de Camagüey* for their kindness and interest; to Xiomara Napoles Gonzales for help in locating and interviewing Haitians in Antón; to Jenny Moreno, Gerardo Pol Hernández and Nelson Belén Hernández for their help with the interviews in Esmeralda; to Pedro Herrera for assisting in the botanical identification of *Artemisia* species; and to Patricia Howard for her comments and editing of the manuscript. This publication represents one of the results of a research project on Haitian ethnobotany in Cuba which has been funded by a grant from the CERES Programme for Innovative PhD Research at Wageningen University (CEPIP-W).

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