

Ethnobotanical Survey of Appetite Suppressant Plants Used in Hauts-Bassins Areas of Burkina Faso

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Abstract

This study aimed to list the medicinal plants used as an appetite suppressant in Hauts-Bassins areas of Burkina Faso. An ethnobotanical survey was undertaken from September to November 2021 using a semi-structured questionnaire. To determine well-known families and species, some indices such as Family Importance Value (FIV) and Relative Frequency of Citation (RFC) were calculated respectively. Sixty-seven traditional healers (41 men and 26 women) have been interviewed. The age group from 41 to 60 years old was more represented (47.76%). Fifty-eight (58) plant species belonging to 29 families and 53 genera were recorded to have appetite suppressant properties. Fabaceae family (25%) was the most mentioned followed by Combretaceae (12%). The most mentioned species were *Guierasenegalensis* (7.64%), *Parkia biglobosa* (6.18%), *Annona senegalensis* and *Gardenia erubescens* (5.35% for both). Leaves and fruits had the highest frequencies of use with 41% and 25% respectively. The decoction (49.62%) was the main preparation method. The oral route was the only mode of drug administration. These results would contribute to strengthening the database on the medicinal plants used as an appetite suppressant by the traditional healers in Burkina Faso.

Keywords

Ethnobotanical Survey, Appetite Suppressant Plants, Hauts-Bassins Areas,

1. Introduction

Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health. The Body Mass Index (BMI) is the most common measure for assessing overweight (BMI > 25 kg/m²) and obesity (BMI > 30 kg/m²) [1]. The prevalence of obesity continues to increase worldwide so does the burden of its associated comorbidities (diabetes, hypertension, heart and cerebrovascular diseases) [2]. According to WHO, 39% and 13% of adults are overweight and obese, respectively worldwide [3]. In the United States, 60% of adults are either obese or overweight [4]. In France, the prevalence of obesity in adults was 17.5% [5]. According to the WHO, overweight and obesity are increasingly becoming significant problems not only in high-income countries but also in developing countries. In Africa, 20% to 50% of urban populations are overweight or obese [6]. In Burkina Faso, the prevalence of obesity and overweight were estimated at 7.6% and 13.5%, respectively [7]. The main cause of obesity is excessive intake of calorie foods combined with low physical activity, although genetic, endocrine and environmental influences are risk factors [1]. The conventional obesity therapy mainly involves synthetic drugs, which have harmful side effects and are inaccessible due to their very high costs [1]. Many of these synthetic drugs have been withdrawn from the market because of their adverse effects [8]. The research for new safe molecules anti-obesity then became more than a necessity. An appetite suppressant can be an excellent tool in weight management if used safely and effectively [9]. A meta-analysis on natural anti-obesity agents during the period of 2000-2018 revealed the appetite suppressant properties of several plants [10]. *Hoodia gordonii* (Masson) Sweet ex Decne is used in South Africa for its appetite suppressant and weight loss properties linked to its P-57 content [11] [12]. P57 is a pregnane glycoside which acts by increasing ATP in hypothalamic cells [13]. *Tamarindus indica* L. and *Caralluma fimbriata* (Wall.) Gravelly & Mayur are used respectively in Brazil and India to decrease food intake and reduce weight gain [14] [15]. Most of the West Africa population resort to plants during the periods of hunger and famine [16] [17]. A survey on appetite suppressant plants was carried out in the northern region of Burkina Faso [18]. However, no information on these types of plants is available in the Western region of Burkina Faso.

This study aimed to list the medicinal plants used as an appetite suppressant by traditional healers in Hauts-Bassins areas of Burkina Faso.

2. Materials and Methods

2.1. Description of Study Area

The survey was conducted in Hauts-Bassins area (**Figure 1**). Hauts-Bassins

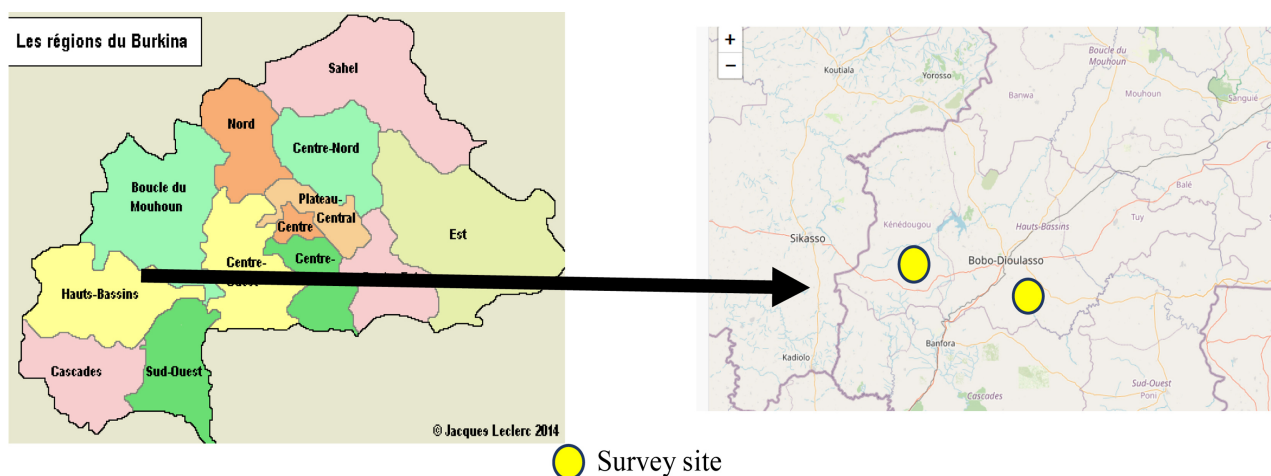


Figure 1. Maps of de the study area [20].

regions is located in western of Burkina Faso, between 11,027'N latitudes and 4021'W longitudes. It is subdivided in 3 provinces (Houet, Tuy and Kénédougou) and covers an area of 25,479 km² (about 9.4% of the country's) with a population around 2,238,375 people [19]. It is bounded on the north by Boucle du Mouhoun region (Dedougou), on the south by the Cascades (Banfora), on the east by Southwest region (Gaoua) and on the west by the Republic of Mali. The climate is tropical and it is marked by 2 main seasons: a wet season which lasts 6 to 7 months (May to October/November) and a dry season which lasts for 5 to 6 months (November/December to April). The rainfall is between 800 and 1200 mm. Average temperatures oscillate between 24°C and 30°C. Hauts-Bassins region is characterized by the density of its natural vegetation composed essentially of savannah, with all subtypes from wooded savannah to grassy savannah. The Hauts-Bassins area has the second highest prevalence of obesity and overweight [7].

2.2. Data Collection

The survey was conducted in Hauts-Bassins areas during the period from September to November 2021 using a semi-structured questionnaire. Traditional healers were interviewed in local language (Mooré, Dioula, Bobo, Dafing) or in French. Inclusion criteria were: to be a traditional healer in Hauts-Bassins areas and to have given informed consent.

Data collected mainly were sociodemographic profile of participants, plant local names, parts used, the method of drug preparation and administration.

2.3. Identification of Plants

Specimens were collected from interviewees and they were botanically identified and authenticated by Pataréyaoba Alassane OUEDRAOGO, botanist and Inspector General of water and Forests at National School of Water and Forests/Burkina Faso.

2.4. Data Analysis

Survey data were processed by the XLSTAT software version 2014, and the following indices were calculated:

- **Family Importance Value (FIV):** It determines the most used family of species. It was calculated by the following formula [21]:

$$FIV = \frac{FC(\text{Family})}{N} \times 100$$

where FC is the number of citations of the family considered and N is the total number of respondents.

- **Relative Frequency of Citation (RFC):** it determines the most used species. It was calculated by the following formula [22]:

$$RFC = \frac{FC}{N} \times 100$$

where FC is the number of citations of the plant considered and N is the total number of respondents.

3. Results

3.1. Socio-Demographic Profile of Traditional Healers

During the survey, 67 traditional healers have been interviewed including 41 men (61.19%) and 26 women (38.81%). The age of the interviewees was varied between 22 and 85 years. The age group from 41 to 60 years old was more represented (47.76%) than the other (**Figure 2(a)**). The majority (71.64%) of the

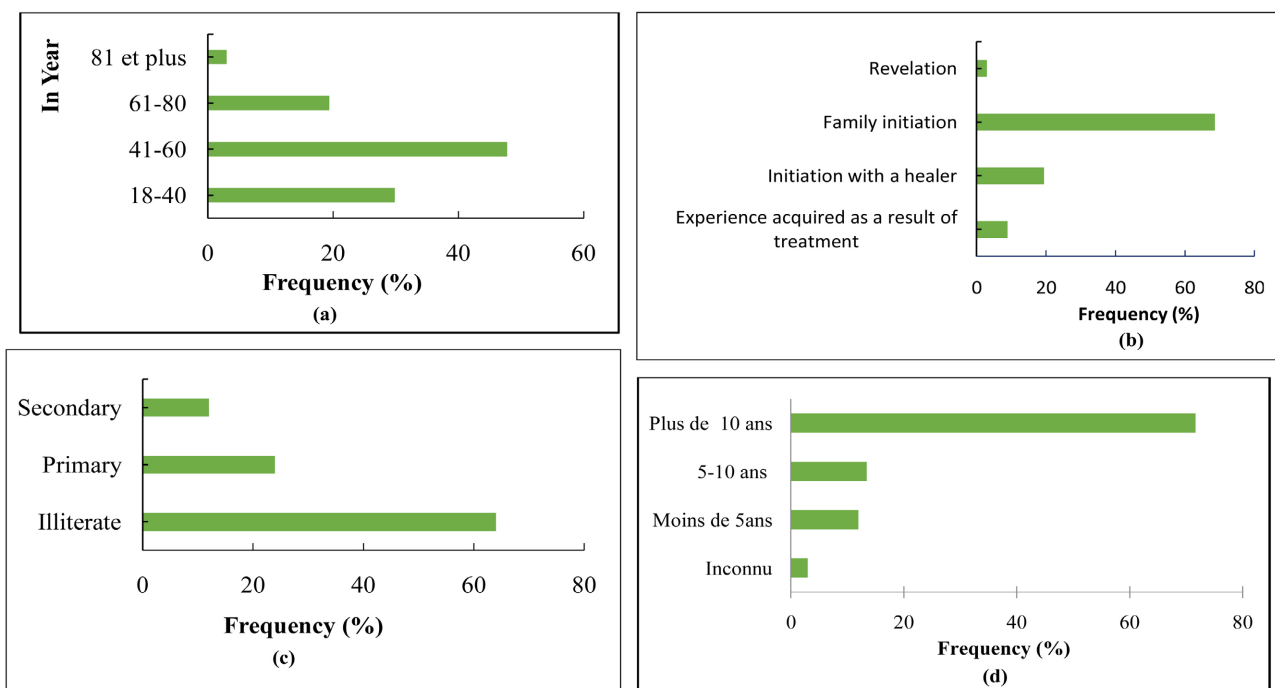


Figure 2. Socio-demographic profile of traditional healers: (a) Age group of traditional healers; (b) Learning mode of traditional healers; (c) Education level of traditional healers; (d): year of practical experience of traditional healers.

respondents have at least 10 years of practical experience (**Figure 2(d)**) and learned this activity by family initiation (68.66%) (**Figure 2(b)**). Most traditional healers (64%) was illiterate (**Figure 2(c)**).

3.2. Plants with Appetite Suppressant Properties

3.2.1. Family Importance Value (FIV)

The **Figure 3** summarizes the Family importance value (FIV) of plants used as appetite suppressant in Hauts-Bassins area. Twenty-nine (29) families were identified. The highest FIV were obtained with Fabaceae (25%) followed by Combretaceae (12%), Anacardiaceae (8%) and Asclepiadaceae (7%). The other families had lower FVI index (between 1% and 5%).

3.2.2. Plants Parts Used

The barks, leaves, fruits, seeds, roots and tubers were main plant parts used for drugs preparation. Other parts such as the whole plant, twigs, and stem have been mentioned. The leaves (41%) and fruits (25%) were the most cited parts (**Figure 4**).

3.3. Preparation and Administration Modes

The decoction (49.62%) was the main preparation method followed by the consumption of raw material (44.36%). The infusion and the maceration (3.01% for each) are the preparation modes less used (**Figure 5**). The preparation were

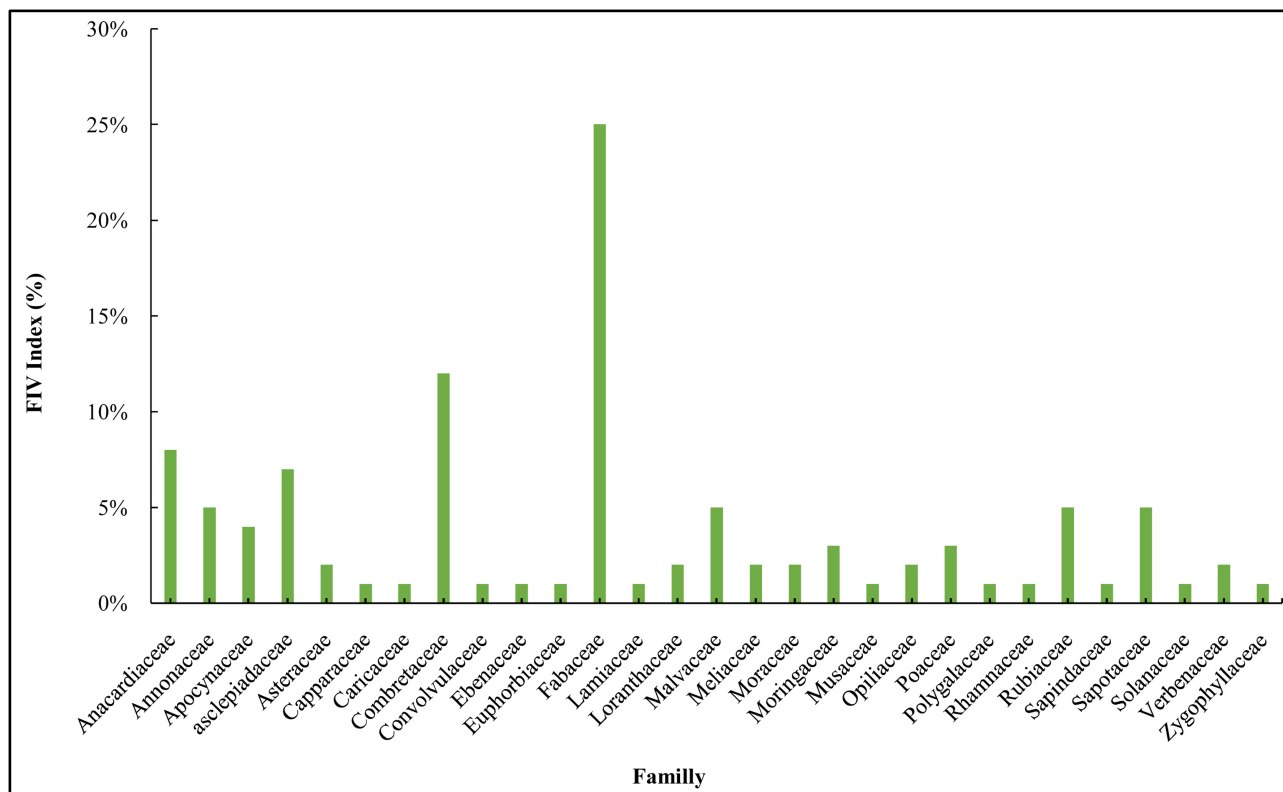


Figure 3. Family Importance Value (FIV) of plants.

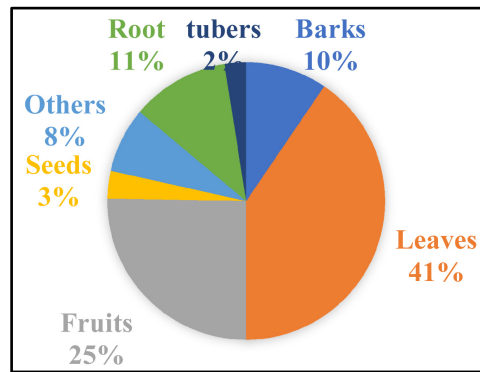


Figure 4. Plants parts used.

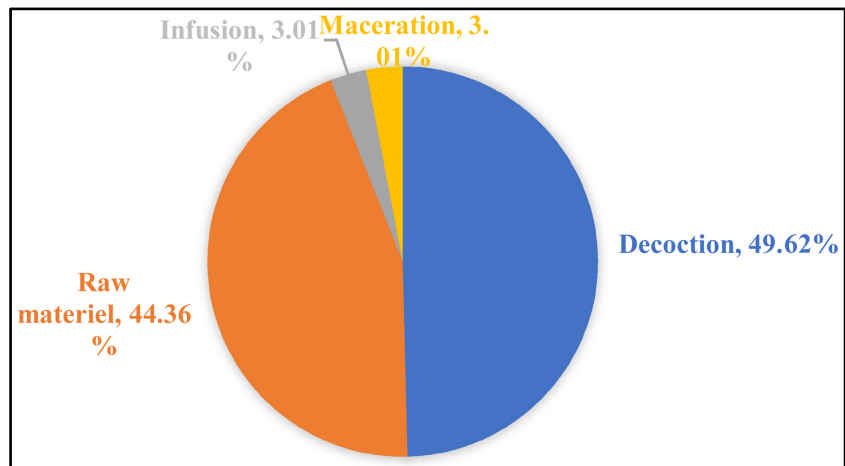


Figure 5. Drug preparation methods.

administered orally either in the form of drink (55.64%) or in raw consumption (44.36%).

3.4. Species Used as Appetite Suppressant

The survey revealed that fifty-eight (58) species belonging to twenty-nine (29) families were used as appetite suppressant by the traditional healers of Hauts-Bassins areas from Burkina Faso. The local name, RFC, the parts used, the mode of drugs preparation, the administration and the other uses of these plants are recorded in **Table 1**. According to the relative frequency of citation (RFC), the most mentioned species were *Guiera senegalensis* J. F. Gmel (7.64%), *Parkia biglobosa* (Jacq.) R.Br. ex G. Don (6.11%), *Annona senegalensis* Pers. and *Gardenia erubescens* Stapf & Hutch (5.35% for both) followed by *Vitellaria paradoxa* C. F. Gaertn (4.58%), *Saba senegalensis* (A.DC.) Pichon and *Leptadenia hastata* (Pers) Decne (3.82% for both), *Ozoroa obovata* (Oliv) (3.76%), *Tamarindus indica* L., *Raphionacme splendens subsp. bingeri* (A. Chev.), *Piliostigma thonningii* (Schumach) Milne-Redh., *Moringa oleifera* L, *Acacia nilotica* (L.) Willd. ex Delile (3.06% for each). The rest species had a lower RFC varying between 1.53% and 0.76% (**Table 1**).

Table 1. Plants uses by traditional healers as appetite suppressants.

Scientific names	Famillies	Local name	RFC (%)	Properties	Others uses	Part used	Preparation and used method
<i>Acacia nilotica</i> (L.) Willd. ex Delile	Fabaceae	Gonpèlga (mooré)	03.06	appetite suppressant	Sex shrinkage in women, stomach ache, intestinal pain, deparasite	Fruits	Decoction
<i>Adansonia digitata</i> L.	Bombacaceae	Toèga (mooré) Sira yiri (dioula) Baobab (Français)	01.53	appetite suppressant	Heart disease, bone disease, erectile dysfunction	Leaves, Fruits	Raw materiel or Decoction
<i>Annona senegalensis</i> Pers.	Annonaceae	Badkudga (mooré) Mandé sousou (dioula)	05.35	appetite suppressant	Cigarette Cessation, Poison Control, Baby Weight Loss, Malaria, Vertigo	Fruits	Raw materiel or Infusion
<i>Arachis hypogaea</i> L. [cult.]	Fabaceae	Tiiguin (dioula) Arachide (Français)	0.76	appetite suppressant/ thirst quencher	Stomach pain	Leaves	Decoction
<i>Balanites aegyptiaca</i> (L.) Delile	Balanitaceae	Kieglga (mooré) Zèguene yiri (dioula) Dattier du désert (Français)	0.76	appetite suppressant/ thirst quencher	Malaria	Fruits	Raw materiel
<i>Bobgunnia madagascariensis</i> (Desv.) J. H. Kirkbr. & Wiersema	Fabaceae	Mica-fonnon (dioula)	0.76	appetite suppressant		Leaves, Root	Decoction
<i>Carica papaya</i> L. [cult.]	Caricaceae	Papayé yiri (dioula) Papaye (Français)	0.76	appetite suppressant	ulcer	Fruits	Raw materiel
<i>Cassia sieberiana</i> DC.	Fabaceae	Sindjan (dioula)	0.76	appetite suppressant	Stomach pain	Root	Decoction
<i>Cassia obtusifolia</i> L.	Fabaceae	krikri (dioula) Sugda (mooré)	0.76	appetite suppressant	Bone consolidation	Leaves	Decoction
<i>Ceiba pentandra</i> (L.) Gaertn.	Malvaceae	Gunga (mooré) Kapokier à fleurs blanches	0.76	appetite suppressant/ thirst quencher	Energising	young leaves	Raw materiel
<i>Chrysanthellum indicum</i> DC.	Asteraceae	Mon père café (dioula) Wal-tuka (mooré)	0.76	appetite suppressant	CEdema	Leaves	Decoction
<i>Combretum glutinosum</i> Perr. ex DC.	Combretaceae	kuinga (mooré)	01.53	appetite suppressant/ thirst quencher	Constipation	Leaves	Decoction
<i>Combretum micranthum</i> G. Don	Combretaceae	Randga (mooré)	0.76	appetite suppressant	HTA, diabetes, improves vision	Seed	Raw materiel
<i>Crateva adansonii</i> DC.	Capparaceae	Banegnou (dafinfinfing)/ Kalgemtoèga (mooré)	0.76	appetite suppressant	anaemia	Leaves	Decoction

Continued

<i>Cymbopogon caesius</i> (Nees ex Hook. & Arn.) Stapf	Poaceae	Kuwaré (mooré)	0.76	appetite suppressant/ thirst quencher		Leaves	Decoction
<i>Cymbopogon citratus</i> (DC.) Stapf	Poaceae	Citronnelle (français)	0.76	appetite suppressant	Nausea	Leaves	Decoction
<i>Daniellia oliveri</i> (Rolfe) Hutch. & Dalziel	Fabaceae	Sana yiri (dioula) Aonga (mooré)	0.76	appetite suppressant	Breathing disorders	Leaves	Raw materiel
<i>Detarium microcarpum</i> Guill. & Perr.	Fabaceae	Kagdga (mooré)	01.53	appetite suppressant	Deparasite, ulcer	Leaves	Decoction
<i>Diospyros mespiliformis</i> Hochst. ex A.DC.	Ebenaceae	Soun soun fii (dioula)	0.76	appetite suppressant		Leaves	Decoction
<i>Entada africana</i> Guill. & Perr.	Fabaceae	Sama-nèrè (dioula)	0.76	appetite suppressant/ thirst quencher	Defatigant	Root	Maceration
<i>Feretia apodanthera</i> Delile	Fabaceae	Globin (siamou) Doura songalani (dioula)	0.76	appetite suppressant		Leaves, Fruits	Infusion or Raw materiel
<i>Ficus ingens</i> (Miq.) Miq.	Moraceae	Djatiguifaga (dioula)	1.53	appetite suppressant	Injury, malaria	Leaves, Root	Decoction
<i>Garcinia ovalifolia</i> Oliv.	Malvaceae	Petit cola (Français)	0.76	appetite suppressant/ thirst quencher	Erectile dysfunction	Seed	Raw materiel
<i>Gardenia erubescens</i> Stapf & Hutch.	Rubiaceae	Subudga (mooré) Gulé muso (dioula)	05.35	appetite suppressant/ thirst quencher	Bone consolidation, malaria	Fruits	Raw materiel or Decoction
<i>Grewia mollis</i> Juss.	Malvaceae	Moumouka (mooré)	0.76	appetite suppressant/ thirst quencher		Fruits	Decoction
<i>Guiera senegalensis</i> J. F. Gmel.	Combretaceae	Wilin-wiiga (mooré) Koun gouè (dioula)	7.64	appetite suppressant/ thirst quencher	Malaria, Diarrhea, Cough, Fortify bones, Vomiting	Leaves	Decoction
<i>Hibiscus sabdariffa</i> L. [cult.]	Malvaceae	Dâ (dioula) Oseille de Guinée (Français)	0.76	appetite suppressant		Seed	Decoction
<i>Ipomoea eriocarpa</i> R.Br.	Convolvulaceae	Djilindjiti (mooré)	0.76	appetite suppressant		twigs	Decoction
<i>Khaya senegalensis</i> (Desr.) A. Juss.	Meliaceae	Djala (dioula) Kuka (mooré) Cailcedrat (Français)	01.53	appetite suppressant/ thirst quencher	Wound, Malaria, Pain	Barks	Decoction
<i>Lannea acida</i> A. Rich.	Anacardiaceae	Sabtulga (mooré)	01.53	appetite suppressant/ thirst quencher		Bark	Decoction
<i>Lannea microcarpa</i> Engl. & K. Krause	Anacardiaceae	Péku-yiri (dioula) Raisin (Français)	01.53	appetite suppressant	Malaria	Fruits	Raw materiel

Continued

<i>Leptadenia hastata</i> (Pers.) Decne.	asclepiadaceae	Lelongo (mooré) Sowé (dioula)	03.82	appetite suppressant/ thirst quencher	Neurological disorders, Hypertension	Leaves	Raw materiel
<i>Leucas martinicensis</i> (Jacq.) R.Br.	Lamiaceae	Toutouyiri (dioula) Biinwubdo(mooré)	0.76	appetite suppressant/ thirst quencher	Defatigant	Leaves	Decoction
<i>Mangifera indica</i> L. [cult.]	Anacardiaceae	Mango tiiga (mooré) Mangue (Français)	0.76	appetite suppressant		Fruits	Raw materiel
<i>Manihot esculenta</i> Crantz [cult.]	Euphorbiaceae	Banacou (dioula) Manioc (Français)	0.76	appetite suppressant		Leaves	Decotion or infusion
<i>Moringa oleifera</i> L.	Moringaceae	Ardjina yiri (dioula) Arzen tiiga (Mooré)	03.06	appetite suppressant/ thirst quencher		Leaves	Decoction
<i>Musa sinensis sagot</i>	Musaceae	Baranda (dioula) Banane (Français)	0.76	appetite suppressant		Fruits	Raw materiel
<i>Opilia amentacea</i> Roxb.	Opiliaceae	Nè bossi (dioula) Wag salega (mooré)	01.53	appetite suppressant	Fortify bones	Fruits	Decoction
<i>Ozoroa obovata</i> (Oliv.)	Anarcadiaceae	Sandé worosso (dioula)	03.76	appetite suppressant/ thirst quencher	Anaemia, Malaria, Fortify	Leaves	Decoction
<i>Parkia biglobosa</i> (Jacq.) R.Br. ex G. Don	Fabaceae	Nèrè (Français) Roânga (mooré)	06.11	appetite suppressant		Fruits	Infusion or Raw materiel
<i>Paullinia pinnata</i> L.	Sapindaceae	Mousonou(mooré) Barkawili (dioula)	0.76	appetite suppressant/ thirst quencher	anaemia	Root	Decoction
<i>Pennisetum glaucum</i> (L.) R.Br. [cult.]	Poaceae	Gnor (dioula) Petit mil (Français)	01.53	appetite suppressant	Diabetes	Seeds	Maceration
<i>Piliostigma thonningii</i> (Schumach.) Milne-Redh.	Fabaceae	Gnama yiri (dioula)	03.06	appetite suppressant/ thirst quencher		Leaves	Decoction
<i>Pteleopsis suberosa</i> Engl. & Diels	Combretaceae	Guirdga (mooré)	0.76	appetite suppressant	toothaches, ulcers, chronic sores	Bark	Maceration
<i>Pterocarpus erinaceus</i> Poir.	Fabaceae	Noynga (mooré)	01.53	appetite suppressant	anaemia	Bark	Decoction
<i>Pterocarpus lucens</i> Lepr. ex Guill. & Perr.	Fabaceae	Therba (samo)	0.76	appetite suppressant/ thirst quencher		young leaves	Decoction or Raw materiel
<i>Raphionacme splendens</i> subsp. bingeri (A. Chev.)	Asclepiadaceae	Sindo (mooré) Fié (dioula)	03.06	appetite suppressant		Tubers	Raw materiel
<i>Saba senegalensis</i> (A.DC.) Pichon	Apocynaceae	Zaban yiri (dioula) Lianne (Français)	03.82	appetite suppressant/ thirst quencher	anaemia	Bark	Decoction
<i>Sclerocarya birrea</i> (A.Rich.) Hochst.	Anacardiaceae	Kuna yiri (dioula) Nobga (mooré)	01.53	appetite suppressant	Hypertension	fruits	Raw materiel

Continued

<i>Securidaca longipedunculata</i> Fresen.	Polygalaceae	Djoro (dioula)	0.76	appetite suppressant/thirst quencher	Malaria	Roots	Decoction
<i>Solanum aethiopicum</i> L. [cult.]	Solanaceae		0.76	appetite suppressant		fruits, Leaves	Raw materiel
<i>Tamarindus indica</i> L.	Fabaceae	Tomi yiri (dioula) Tamarinier (Français)	03.06	appetite suppressant	Malaria	Fruits	Raw materiel
<i>Tapinanthus globiferus</i> (A.Rich.) Tiegh.	Loranthaceae	kouna yiri ladon (dioula)	01.53	appetite suppressant	Urinary disorders, stomach ache	whole plant	Raw materiel
<i>Terminalia avicennioides</i> Guill. & Perr.	Combretaceae	kondré (mooré) wolon yiri (dioula)	0.76	appetite suppressant	Constipation, stomach aches	Leaves, Roots	Decoction
<i>Vernonia adoensis</i> Sch.Bip. ex Walp.	Asteraceae	Yirimassa (dioula)	0.76	appetite suppressant	Pain	Stem	Raw materiel
<i>Vitellaria paradoxa</i> C.F.Gaertn.	Sapotaceae	Taanga (mooré) Sii yiri (dioula) Karité(Français)	04.58	appetite suppressant/thirst quencher	heavy menstrual flow	Bark	Maceration
<i>Vitex doniana</i> Sweet	Verbenaceae	koto (dioula) Andga (mooré)	01.53	appetite suppressant	Hypertension	Leaves	Decoction
<i>Ziziphus mauritiana</i> Lam.	Rhamnaceae	Mougna (mooré) Jujubier (Français)	0.76	appetite suppressant/thirst quencher		Fruits	Raw materiel

4. Discussions

Out of 67 traditional healers interviewed in this survey, the majority had ages ranging from 41 to 60 years (47.76%). According to Ouattara *et al.* in 2021, traditional medicine was generally practiced by people of advanced age [23]. 71.64% of our population had at least 10 years of practical experience and had learned this activity through a family initiation (68.66%). The same trend was observed by Kamboule *et al.*, conducted in 2020 in Bobo-Dioulasso [24].

The survey revealed that Fifty-eight (58) species belonging to twenty-nine (29) families were used as appetite suppressant by the traditional healers of Hauts-Bassins areas of Burkina Faso. The most mentioned families were Fabaceae (25%) followed by Combretaceae (12%), Anacardiaceae (8%) and Asclepiadaceae (7%). The predominance of medicinal use of Fabaceae in this region of Burkina Faso is in agreement with the data of ethnomedicinal survey carried out by Zongo *et al.*, and Kam *et al.*, in 2020 in the same areas [25] [26]. These results could be explained by the wide uses of the Fabaceae family in Burkina Faso for care management [27]. Others studies have also shown that the majority of plant species with anti-obesity properties belong to the Fabaceae and the Asteraceae families [8] [28].

The plants organs mostly used were leaves (41%) and fruits (25%). Leaves and

fruits are the most used parts of the plants because they are accessible and do not require much treatment before consumption to suppress appetite.

The main modes of drugs preparation were decoction (49.62%) followed by raw consumption (44.36%). Those results is in agreement with Paré's study which revealed the predominance of raw consumption (65%) and decoction (35%) as drugs preparation method. The drugs were generally administered orally [18].

An study have been conducted in the Northern areas of Burkina Faso and thirty-eight (38) species have been identified as appetite suppressants plants [18]. Among these plant species *Annona senegalensis*, *Balanites aegyptiaca*, *Brachystelma bingeri*, *Detarium microcarpum*, *Diospyros mespiliformis*, *Gardenia erubescens*, *Hibiscus sabdariffa*, *Lannea microcarpa*, *Leptadenia hastata*, *Saba senegalensis*, *Sclerocarya birrea*, *Tamarindus indica*, *Vitex doniana*, *Vitellaria paradoxa*, *Zizyphus mauritiana* were also inventoried in our study. The most cited plant species in our survey were *Guiera senegalensis* (07.62%) followed by *Parkia biglobosa* (06.18%), *Annona senegalensis* and *Gardenia erubescens* (05.32% for each). *Parkia biglobosa*, *Annona senegalensis*, *Gardenia erubescens* are generally food plants used during the periods of famine in Mali [29]. The study of Kouakou *et al.* realized in 2020 in Ivory Coast on plants used to manage certain metabolic syndromes (diabetes, high blood pressure and obesity) showed that *Parkia bliglobosa* was among the most cited plants for the management of obesity [30]. The surveys carry out by Paré *et al.*, in 2016 in the north and Ouédraogo *et al.*, in 2019 in the Sudan savannah of Burkina have reported that *Annona senegalensis* and *Gardenia erubescens* were mostly known for their appetite suppressant properties [18] [31]. The fruits of *Parkia biglobosa* and *Gardenia erubescens* were also among the most consumed edible fruits in the southern of Burkina [32].

Others plants like *Caralluma fimbriata*, *Camellia sinensis*, *Capsicum annum*, *Garcinia cambogia*, *Plantago ovata*, have been reported to be acting as appetite suppressant [9]. The majority of approved anti-obesity drugs act by inhibiting food intake [33]. Consequently, it is necessary to continue the research on these appetite suppressant plants in order to evaluate their effectiveness.

5. Conclusion

This survey revealed that fifty-eight (58) species belonging to twenty-nine (29) families were used as appetite suppressant plants by traditional healers in Hauts-Bassins areas of Burkina Faso. The most mentioned families were Fabaceae and Combretaceae; the most cited species were *Guiera senegalensis*, *Parkia biglobosa*, *Annona senegalensis* and *Gardenia erubescens*. Leaves and fruits were the most parts used for drug preparation mainly by decoction or raw consumption. The oral route was the only mode of drug administration. This ethnobotanical survey provides a database on plants used as appetite suppressants in Hauts-Bassins areas of Burkina Faso. Further studies will be necessary to high-

light the appetite suppressant properties of these plants and their effectiveness against obesity.

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Conflicts of Interest

The authors declared that present study was performed in absence of any conflict of interest.

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