

# Medicinal Plants found at OPC

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## 1. Introduction

The disappearance of medicinal plants is an issue that must be taken seriously; it is mainly due to the disappearance of the habitats by deforestation (Addo-Fordjour et al., 2012). The knowledge on medicinal plants is traditionally transmitted orally and the younger generation nowadays often does not get this education. It is therefore fundamental to conserve this know-how in documentations. In Ghana, there are several regional documentations (e.g. Abbiw 1990, Agbovie et al. 2002, Abel and Busia 2005, Ameyaw et al. 2005, Asase et al. 2005, Addo-Fordjour et al. 2008), which are brought together in a review from Addo-Fordjour et al. (2012). Furthermore, there is a book published by the “Scientific, Technical and Research Commission of the Organization of African Unity”, which unites all information on medicinal plants in Ghana (Mshana et al., 2000). The present document on the medicinal plants at OPC is based on the previously mentioned review and book, as well as on the knowledge of Zakari Abu-Mohammed, who received education on medicinal plants from his grandfather as a child and who therefore was able to acquire a deep knowledge. The plants treated in this document were chosen according to his knowledge.



Medicinal plant garden at OPC (Busua)



Preparation of herbal tea at OPC

## 2. Aim

The aim of this document is to provide a knowledge on the medicinal plants available at the OPC farm in Busua (Western Region, Ghana). With a better knowledge on the plants, it will be easier to select the useful one, for example when weeding. Furthermore, this knowledge will help choosing new plants to add in the medicinal plant garden.

This document should be dynamic and new information on these plants and new plants should be added.

### 3. The Plants

As stated in Addo-Fordjour et al. (2012), the correct identification of plants is among the biggest challenges in traditional herbal medicine. Similarly, in this work, the name and the uses of each plants are to be taken **cautiously**, since no tropical botanist has checked all the plants on field (most pictures have been checked by the curator of the herbarium of Legon, Mr. Patrick Ekpe). For certain plants, no latin / local name is available; therefore, only Mr. Zakari Abu-Mohammed's knowledge is available for them. Furthermore, some plants could not be identified with certainty (*Ficus sp.* for example); therefore, the medical properties should be taken **theoretically** and not been applied before the identity of the plant is confirmed.

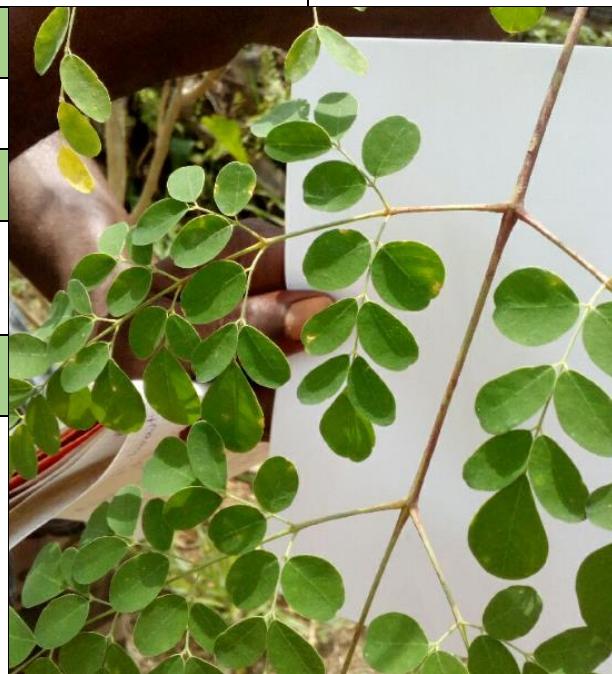
Concerning the way each plant must be prepared, the indications from Zakari Abu-Mohammed are provided; to complete this information, the book "Floristic Studies in Ghana" (Mshana et al., 2000) can be consulted on pages 624-766. In this file, the sicknesses from the book are mentioned, as well as the number (e.g. B15.9) for the adapted preparation.

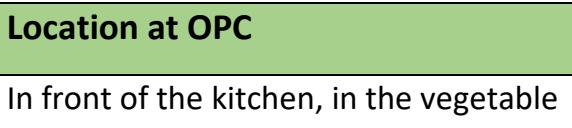
A glossary of all the sicknesses is available in Mshana et al. (2000) in chapter 8 (p. 843 - 857).

<b>Latin name:</b>	<i>Ocimum gratissimum</i>	
<b>Other names:</b>	Basil, tea bush, mosquito plant, Nunum / Onunum (Twi & Fante), Amaloka (Nzema)	
<b>Plant Family:</b>	Lamiaceae	
<b>Habitat</b>	Coastal scrubland, lakeshores, savannas, submontane forests, around villages and along roadsides and streams, from sea level up to 2300m ( <a href="http://www.cabi.org">www.cabi.org</a> )	
<b>Origin</b>	Native of Asia, Pantropical nowadays (Mshana et al., 2000)	
<b>Characteristics</b>	Odoriferous shrub, lignified a little; leaves opposite, elliptic or ovate-elliptic, with dentate margins about 10 cm long. Inflorescence spiciform terminal raceme: flowers in groups of 4-6: corolla white: calyx persistent after corolla falling, bulging at the base (Mshana et al., 2000)	
<b>Medicinal properties</b>		
<b>Zakari Abu-Mohammed, 2020</b>	<b>Mshana et al., 2000 (p. 293)</b>	<b>Addo-Fordjour et al., 2012</b>
- Infusion of leaves is nourishing for the foetus and helps healing the womb of women who have delivered (in Northern Ghana, women drink the infusion of the leaves during one week after delivery) - Healing bone fractures	<b>Leaves:</b> infective hepatitis <sup>1</sup> , allergic rhinitis <sup>2</sup> , catarrh <sup>3</sup> , dysentery <sup>4</sup> , fever (children) <sup>5</sup> , sinusitis <sup>6</sup> , malaria <sup>7</sup> , vomiting <sup>8</sup> , lower abdominal pain (post-partum) <sup>9</sup> , diarrhea <sup>10</sup> , constipation <sup>11</sup> , dyspepsia <sup>12</sup> , trichomoniasis <sup>13</sup> , menorrhagia <sup>14</sup> , abdominal colic <sup>15</sup> <b>Whole plant:</b> Rheumatism <sup>16</sup> <b>Roots:</b> Snake bites <sup>17</sup>	<b>Leaves:</b> Wound healing, appetizer, catarrh, colds, cough, diarrhea <b>Leaves and roots:</b> Fever, stomachache, snakebite, dysentery, malaria, catarrh <b>Whole plant:</b> Diaphoretic
<b>Type of preparation</b>		
Zack: prepared in soup, squeezed in nose to sneeze out	B15.9 <sup>1</sup> , J30.1 <sup>2</sup> , J00 <sup>3</sup> , A09 <sup>4</sup> , R50.0 <sup>5</sup> , J32.9 <sup>6</sup> , B54 <sup>7</sup> , R.11 <sup>8</sup> , 10.3 <sup>9</sup> , A09 <sup>10</sup> , K59.0 <sup>11</sup> , 92.01 <sup>12</sup> , R10.4 <sup>13</sup> // M79.0 <sup>14</sup> // T63.4 <sup>17</sup>	

<b>Latin name:</b>	<i>Lantana camara</i>	
<b>Other names:</b>	Anansedokono (Twi), wild sage	
<b>Plant Family:</b>	Verbenaceae	
<b>Habitat</b>	A weed in waste places, often notorious (Mshana et al., 2000)	
<b>Origin</b>	American tropics (Wikipedia, 03.2020)	
<b>Characteristics</b>	Erect spreading much-branched, square-stemmed shrub, usually with short prickles; leaves, petioles and peduncles pilose, or strigose; flowers showy in convex heads 3-6 cm across. (Mshana et al., 2000)	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p.591)</b>	<b>Addo-Fordjour et al., 2012</b>
- malaria - diabetes - enhances memory - boasts immune system	<b>Leaves:</b> fever <sup>1</sup> , jaundice <sup>2</sup> and wound <sup>3</sup>	<b>Whole plant:</b> wound, jaundice, fever <b>Latex:</b> Lactogenic
<b>Type of preparation</b>		
Stew, Tea, dry (not in sun --> indoor) and grind in powder form	R50.9 <sup>1</sup> , R17 <sup>2</sup> , T14.1 <sup>3</sup>	

<b>Latin name:</b>	<i>Launaea taraxicifolia</i> (= <i>Lactuca taraxicifolia</i> )	
<b>Other names:</b>	“Dandelion”, Owowogon (Fante)	
<b>Plant Family:</b>	Asteraceae	
<b>Habitat</b>	Weed of cultivated lands (Mshana et al., 2000), frequently found in disturbed localities in open savanna vegetation. Do not tolerate shade ( <a href="http://uses.plantnet-project.org">uses.plantnet-project.org</a> )	
<b>Origin</b>	Probably originates from Ethiopia but occurs from Senegal to Ethiopia and Tanzania. Domesticated in Nigeria ( <a href="http://uses.plantnet-project.org">uses.plantnet-project.org</a> ).	
<b>Characteristics</b>	Weedy herb with erect glabrous stem arising after the formation of a basal rosette of leaves from an underground branching and proliferating rhizome; sap milky; florets yellow (Mshana et al., 2000)	
		
		<b>Location at OPC</b>
		In the medicinal herbs garden
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p.113)</b>	<b>Addo-Fordjour et al., 2012</b>
- Blood pressure - Cardiovascular diseases - Men's health - Diabetes - Boosts immune system	<b>Leaves:</b> diabetes mellitus <sup>1</sup> , toothache <sup>2</sup> , sleep rhythm inversion (in children) <sup>3</sup> , yaws <sup>4</sup> <b>Leafy stem:</b> treatment of paralytic stroke <sup>5</sup>	Not listed
<b>Type of preparation</b>		
Tea, salad (garlic and onion --> sandwich)	E14 <sup>1</sup> , K08.8 <sup>2</sup> , G47.2 <sup>3</sup> , A66.9 <sup>4</sup> // T64 <sup>5</sup>	

<b>Latin name:</b>	<i>Moringa oleifera</i>			
<b>Other names:</b>	Babatsi (Ewe), Arzan tiiga (Mole), "Tree of Life"			
<b>Plant Family:</b>	Moringaceae			
<b>Habitat</b>	In farms and compounds			
<b>Origin</b>	Originally from the Himalaya region, but now widely spread in the tropics and subtropics. (V.Kuete, 2017)			
<b>Characteristics</b>	Deciduous tree; bole crooked, often forked from near the base; bark smooth, dark grey; slash thin, yellowish; leaflets dark green above and pale on the under-surface; variable in size and shape but often rounded-elliptic; petals white; fruit light brown. (Mshana et al., 2000)			
				
<b>Location at OPC</b> In the vegetable garden.				
<b>Medicinal properties</b>				
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p.441)</b>	<b>Addo-Fordjour et al., 2012</b>		
<ul style="list-style-type: none"> <li>- Prevents stroke</li> <li>- Glauchoma</li> <li>- Contains vitamine A, B, C, D --&gt; immun system</li> <li>- Fertilizer</li> <li>- Cleaning of water</li> <li>- Nourishing of new born animals (good for their immune system)</li> </ul>	<b>Leaves &amp; Root-bark:</b> Gonorrhea <sup>1</sup> <b>Root:</b> Trauma <sup>2</sup> , scurvy <sup>3</sup> <b>Stem-bark:</b> diarrhoea <sup>4</sup> , scurvy <sup>3</sup> <b>Gum:</b> diarrhoea <sup>4</sup>	Not listed		
<b>Type of preparation</b>				
Pounding of seeds to clean water (Zack).  Dry indoor, grind it and put in stew	A54.9 <sup>1</sup> // T14.9 <sup>2</sup> // E54 <sup>3</sup> // A09 <sup>4</sup>			

<b>Latin name:</b>	<i>Carica papaya</i>	<b>5</b>	
<b>Other names:</b>	Paw-paw, Burosow (Fante), Borofere (Twi), "Mother of all Fruits"		
<b>Plant Family:</b>	Caricaceae		
<b>Habitat</b>			
Only known as a cultivated plant			
<b>Origin</b>			
Native of tropical America, now Pantropical			
<b>Characteristics</b>			
Small tree, up to 10m high; leaves alternate, palmate, clustered at top of stalk; petiole very long and hollow; flowers white, the male one smaller and numerous, clustered in cymes; the female ones subsessile, larger and less numerous, fixed at the axil of leaves; the two types of flowers separated on different plants; fruit big ovoid berry, yellow at maturity. (Mshana et al., 2000)			
<b>Location at OPC</b>		In front of the kitchen, in the vegetable garden, ...	
<b>Medicinal properties</b>			
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p.169)</b>	<b>Addo-Fordjour et al., 2012</b>	
- Leaves: cleansing of body system (prevents accumulation of "flems"?) - Fruit helps digestion - Leaves against malaria - Roots against rashes - Seed is a dewormer	<b>Fruits:</b> jaundice <sup>1</sup> , kerosine poisoning <sup>2</sup> , skin ulcers <sup>3</sup> <b>Roots:</b> urinary retention <sup>4</sup> , dystocia <sup>5</sup> , cough <sup>6</sup> , pharyngitis <sup>7</sup> , snakebite <sup>8</sup> , oliguria <sup>9</sup> <b>Seeds:</b> amebiasis <sup>10</sup> , intestinal helminthiasis <sup>11</sup> , pinworm <sup>12</sup> , tapeworm infestation <sup>13</sup> , ascariasis <sup>14</sup> <b>Leaves:</b> amebiasis <sup>15</sup> , diabetes mellitus <sup>16</sup> , fever <sup>17</sup> , jaundice <sup>18</sup> , malaria <sup>19</sup> , wounds <sup>20</sup> , dystocia <sup>21</sup> , oliguria <sup>9</sup>	<b>Seed:</b> Jaundice, skin ulcer, cough <b>Leaf, root:</b> Malaria <b>Dry leaf:</b> Abortion <b>Root of male:</b> Headache	

	<p><b>Any part:</b> dracontiasis<sup>22</sup></p> <p><b>Latex from unripe fruit:</b> helminthiasis<sup>23</sup></p> <p><b>Flowers:</b> wounds<sup>24</sup>, toothache<sup>25</sup></p>	
<b>Type of preparation</b>		
Grind leaves and add soap (cleansing of body) Roots mixed with garlic against rashes. Add leaves in tea	R17 <sup>1</sup> , J52.0 <sup>2</sup> , L98.4 <sup>3</sup> // R33 <sup>4</sup> , 066.9 <sup>5</sup> , R05 <sup>6</sup> , J02.9 <sup>7</sup> , T63.4 <sup>8</sup> , R34 <sup>9</sup> // A06.9 <sup>10</sup> , B83.9 <sup>11</sup> , B80 <sup>12</sup> , B71.9 <sup>13</sup> , B77.9 <sup>14</sup> // A06.9 <sup>15</sup> , E14 <sup>16</sup> , R50.9 <sup>17</sup> , R17 <sup>18</sup> , B54 <sup>19</sup> , T14.1 <sup>20</sup> , 066.9 <sup>21</sup> , R34 <sup>9</sup> // B72 <sup>22</sup> // B83.9 <sup>23</sup> // T14.1 <sup>24</sup> , K08.8 <sup>25</sup>	

<b>Latin name:</b>	<i>Elaeis guinneaensis</i>	
<b>Other names:</b>	Palm tree, Abe (twi & fante), Arele (Nzema)	
<b>Plant Family:</b>	Palmae / Arecaceae	
<b>Habitat</b>	<p>It is cultivated and occurs spontaneously in much of the forest zone from Senegal to Cameroon, being particularly abundant near habitation, in land which has been tilled and in river valleys. (Mshana et al., 2000)</p>	
<b>Origin</b>	West Africa	
<b>Characteristics</b>	<p>Tree of secondary forest; leaves many, in a terminal crown, commonly spiny at margins; segments in 4 ranks, acuminate, glabrous, the lowest spinescent; spadices interfoliaceous; male flowers densely crowded, minute with linear sepals, petals linear-oblong, stamens 6; female spadix with short peduncle and branches congested into a globose capitulum; female flowers much larger than the male, with ovoid ovary and relatively large resolute stigmas, fruit ovoid of somewhat angular, often bright red and shining black when ripe (Mshana et al., 2000)</p>	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p.465)</b>	<b>Addo-Fordjour et al., 2012</b>
- Red oil against boils and for eyes	<b>Fruits:</b> dracontiasis <sup>1</sup> <b>Kernel:</b> filariasis <sup>2</sup> <b>Oil:</b> Baldness <sup>3</sup> <b>Young petiole:</b> wounds <sup>4</sup> , otalgia <sup>5</sup>	<b>Fruit (oil):</b> boil, dracontiasis, wound, filaries, craw-craw
<b>Type of preparation</b>		
Ingestion.	B72 <sup>1</sup> // B74 <sup>2</sup> // L65.9 <sup>3</sup> // T14.1 <sup>4</sup> , H92.0 <sup>5</sup>	

<b>Latin name:</b>	<i>Chromolaena odorata</i>	<b>7</b>
<b>Other names:</b>	Acheampong (Fante)	
<b>Plant Family:</b>	Asteraceae	
<b>Habitat</b>		
<b>Characteristics</b>		
Herbaceous to woody perennial which forms a very dense thicket about 2 m high. It can become lianescent (when a support is available). After the first year of growth, it develops a strong woody underground storage organ, which can reach a diameter of 20 cm. Stems become woody. Twigs are slightly striolate longitudinally, pubescent, opposite-decussate. Leaves are simple, opposite-decussate and without stipules. They are rhomboid-ovate to ovate with a acute apex and a cuneate base. Leaves and twigs produce a characteristic smell when crushed. ( <a href="http://www.cabi.org">www.cabi.org</a> )		
<b>Location at OPC</b>		
Close to the eating table, in the medicinal plants garden, ...		
<b>Origin</b>		
Native of tropical central and south America ( <a href="http://www.cabi.org">www.cabi.org</a> )		
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000</b>	<b>Addo-Fordjour et al., 2012</b>
- Stops bleeding - Good for stomachache -  Pregnant women should not take it	Not listed	<b>Leaf:</b> wound healing, styptic
<b>Type of preparation</b>		
Squeeze the leaves and apply on wound. Dry and make tea or cook fresh or squeeze in cold water.		

<b>Latin name:</b>	<i>Morinda citrifolia</i>	<b>8</b>
<b>Other names:</b>	Noni, Great morinda, indian mulberry, cheese fruit	
<b>Plant Family:</b>	Rubiaceae	
<b>Habitat</b>		 
It grows in shady forests, as well as on open rocky or sandy shores. It reaches maturity in about 18 months, then yields between 4 and 8 kg of fruit every month throughout the year. It is tolerant of saline soils, drought conditions, and secondary soils. It is therefore found in a wide variety of habitats. (Wikipedia)		
<b>Origin</b>		
Southeast Asia (Almeida et al., 2019)		
<b>Characteristics</b>		<b>Location at OPC</b>
Evergreen, small tree or shrub about 5-10 meters high. The younger branches are angular, ribbed and bare. The leaves are bald, leathery, somewhat stiff and opposite, ovoid to elliptical, lanceolate or inverted ovate and short-stalked. The rather large, entire and shiny leaves are 15-40 cm long. The fragrant, distilled flowers with a fleshy, quadrangular to hexagonal flower cup stand together in axillary and short-stalked heads. The hermaphrodite and penta- to hexagonal flowers with a double flower head are white.		Behind the vegetable garden, surrounded by plantains (or banana?)
		 There are several reports of liver damage in people who drank noni tea or juice for several weeks. However, it is not known for certain if noni was the cause ( <a href="http://www.webmd.com/">www.webmd.com/</a> ).
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana and Addo-Fordjour</b>	<b>Almeida et al., 2019</b>
Noni cures many sicknesses. Among them: - Diabetes - Stroke - Glauchoma - HIV (????)	This species of <i>Morinda</i> genus is not listed.	- antimicrobial and antioxidant properties - Root, stem, fruits, and leaves are traditionally used by several East Asian cultures for the therapeutic treatment of numerous diseases such as arthritis, headaches, burns, and

		<p>even disorders related to tuberculosis, diabetes, and hypertension</p> <ul style="list-style-type: none"> <li>- Anticancer activity</li> <li>- Bactericidal and fungicidal activity</li> <li>- Antiviral activity (HIV?)</li> <li>- Anthelmintic activity</li> <li>- Bone regeneration and treatment of joint pain</li> <li>- strengthen immune system</li> <li>- Against hypertension</li> <li>- Against metabolic disorders caused by obesity</li> <li>Antituberculosis activity</li> <li>Hypoglycemic activity</li> </ul>
<b>Type of preparation</b>		
The fruit is used. It has to get ripe until soft, then juice comes out --> collect the drops then drink directly (1 teaspoon)	-	<p>beverages (juice drinks), powders (from dried fruits), oil (from seeds), and leaf powders.</p> <p>The medical and nutritional values of this plant are not yet fully clarified.</p>

<b>Latin name:</b>	<i>Azadirachta indica</i>	
<b>Other names:</b>	Neem tree, Nim / Aboode (Fante), Nimsi (twi)	
<b>Plant Family:</b>	Meliaceae	
<b>Habitat</b>	Neem trees can invade shrublands, open woodlands, grasslands, floodplains, banks of watercourse, coastal sites and other disturbed natural vegetation (keys.lucidcentral.org)	
<b>Origin</b>	Native of India, now widely spread in all tropical regions of the world (Mshana et al., 2000)	
<b>Characteristics</b>	Small tree, 10 m high, always green. Leaves compound, imparipinnate; leaflets 5-8 lanceolated pairs, falcate, asymmetric at the base, longly acuminate, dentate, glabrous; inflorescence in axillary panicle, small flowers, white fruit berry-like, yellow at maturity. Fragrant. (Mshana et al., 2000)	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p. 415)</b>	<b>Addo-Fordjour et al., 2012</b>
- Regulates menstruation - Malaria	<b>Leaves:</b> ringworm <sup>1</sup> , boils <sup>2</sup> , fever <sup>3</sup> , hepatitis <sup>4</sup> , jaundice <sup>5</sup> , lumbago <sup>6</sup> , malaria <sup>7</sup> <b>Seeds:</b> intestinal helminthiasis <sup>8</sup> , wounds <sup>9</sup> , pruritis <sup>10</sup> , dermatitis <sup>11</sup> <b>Stem-bark:</b> helminthiasis <sup>12</sup> , malaria <sup>13</sup> , pharyngitis <sup>14</sup>	<b>Bark:</b> Ringworm, Boil, Malaria <b>Leaf/Seed:</b> Fever, hepatitis, ringworm <b>Root:</b> Fever <b>Seed:</b> Wound, Antihelminthic, antidote to snake venom
<b>Type of preparation</b>		
Put root in fruit juice and drink it for menstruation regulation. Squeeze leave in water and leave in sun to heat --> bath it and drink it (detoxification). Cook leaf in hot water and drink it (but crush it is better, cooking takes nutrients away)	B35.9 <sup>1</sup> , L02.9 <sup>2</sup> , R50.9 <sup>3</sup> , K75.9 <sup>4</sup> , R17 <sup>5</sup> , M54.5 <sup>6</sup> , B54 <sup>7</sup> // B83.9 <sup>8</sup> , T14.1 <sup>9</sup> , L29.9 <sup>10</sup> , L30.9 <sup>11</sup> // B83.9 <sup>12</sup> , B54 <sup>13</sup> , J02.9 <sup>14</sup>	

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Picture : <http://lilianausvat.blogspot.com/>

<b>Latin name:</b>	<i>Cymbopogon citratus</i>	
<b>Other names:</b>	Lemongrass, Ti-ahaban (Fante)	
<b>Plant Family:</b>	Poaceae	
<b>Habitat</b>	Not known in a wild situation (pfaf.org)	
<b>Origin</b>	Probably originating from India. Widely spread in all tropical regions and cultivated in Africa. (Mshana et al., 2000)	
<b>Characteristics</b>	Perennial herb, robust, growing in dense tufts; leaves flagrant, up to 70 cm. Long and 5-15 mm broad, margins scabrid, midrib prominent beneath; inflorescence in panicles, 30-60 cm long; spikelets sessile, linear or linear-lanceolate. (Mshana et al., 2000)	
 Handling plant may cause skin irritation or allergic reaction	 <b>Location at OPC</b> Vegetable garden / Medicinal plants garden	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p. 265)</b>	<b>Addo-Fordjour et al., 2012</b>
<ul style="list-style-type: none"> <li>- As a condiment in food</li> <li>- Malaria</li> <li>- Fever</li> <li>- Boosts immune system</li> <li>- Good for eyes</li> <li>- Gives stamina (for physical and mental effort)</li> </ul>	<b>Leaves:</b> Diarrhea <sup>1</sup> and rheumatism <sup>2</sup>	Not listed.
<b>Type of preparation</b>		
Cook it as tea, used to boil fresh fish	A09 <sup>1</sup> , M79.0 <sup>2</sup>	

<b>Latin name:</b>	<i>Cyperus nardus</i>	
<b>Other names:</b>	Citronella	
<b>Plant Family:</b>	Poaceae	
<b>Habitat</b>	Known only in cultivation (Mshana et al., 2000)	
<b>Origin</b>	Tropical Asia (Wikipedia)	
<b>Characteristics</b>	A robust grass to 1.5 m, cultivated both as ornamental in garden and as a source of essential oils. (Mshana et al., 2000)	
<b>Location at OPC</b>	Vegetable garden / Medicinal plants garden	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p.267)</b>	<b>Addo-Fordjour et al., 2012</b>
- Mosquito repellent - The smell is calming - Body and hair treatment	<b>Leaves:</b> Malaria <sup>1</sup>	Not listed.
<b>Type of preparation</b>		
- Put leaves in water for mosquito repellent - Make infusion and put it on the face (calming) - Oil extraction	B74 <sup>1</sup>	

<b>Latin name:</b>	<i>Acacia sp.</i>	
<b>Other names:</b>		
<b>Plant Family:</b>		
<b>Habitat</b>	<a href="#">Make Picture</a>	
<b>Origin</b>		
<b>Characteristics</b>		
<b>Location at OPC</b>		
Not on the OPC land. Along the road when entering Busua		
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000</b>	<b>Addo-Fordjour et al., 2012</b>
- Malaria - Fever (roots) - Fertilizer (leaves)		
<b>Type of preparation</b>		
Tea Let leaves decay and mix it to the soil (protected from sun)		

<b>Latin name:</b>	<i>Ipomoea batatas</i>	
<b>Other names:</b>	Sweet potatoe	
<b>Plant Family:</b>	Convolvulaceae	
<b>Habitat</b>	<p>Large range of different environments. From cool temperate grassland to warm wet tropical climates, the organism can grow just about everywhere. Sweet potato needs full sun with well-drained, slightly acidic soil. Deep, easily crumbling sandy soil with a pH of 5.5 - 6.5 is ideal soil. (bioweb.uwlax.edu)</p>	
<b>Origin</b>	<p>Central America or northwestern South America (powo.science.kew.org)</p>	
<b>Characteristics</b>	<p>Perennial, herbaceous climber with tuberous roots. Leaves up to 10 cm long, heart- or egg-shaped, un-lobed or divided into three lobes, sometimes with toothed margins. (bioweb.uwlax.edu)</p>	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana and Addo-Fordjour</b>	<b>Mohanraj and Sivasankar, 2014</b>  <b>(no clear information on how to use each part of the plant)</b>
- Leaves increase blood (tonic) - Diabetes	Not listed.	- Anticancer - Antidiabetic - Anti-inflammatory - Antiallergic - HIV - Cardiovascular problems
<b>Type of preparation</b>		
Leaves can be eaten like kontomire (in palava sauce)	/	The <b>leaves</b> are rich in potent antioxidants and vitamin C, which helps fight free radicals, thus

		<p>preventing premature aging and disease. They boost the immune system and help prevent infections and diseases.</p> <p>The <b>roots</b> of <i>I. batatas</i> have anti-coagulation properties and inhibit HIV replication</p> <p> Sweet potatoes contain oxalic acid, a naturally occurring substance found in some vegetables which may crystallize as oxalate stones in the urinary tract in some people. Therefore, individuals with a known history of oxalate urinary tract stones may be advised to avoid eating them.<sup>89</sup> Adequate intake of water is also advised to maintain normal urine output in these individuals to minimize stone risk.</p>
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<b>Latin name:</b>	<i>Tectona grandis</i>			
<b>Other names:</b>	Teak			
<b>Plant Family:</b>	Lamiaceae			
<b>Habitat</b>	Occurs naturally in various types of tropical deciduous forests (pfaf.org)			
<b>Origin</b>	East Asia			
<b>Characteristics</b>	<p>Teak is a tropical, flowering, deciduous tree up to 40 m tall and 1 m in bole diameter. It has an open crown and its bole is often buttressed. The flowers are fragrant, white and small. Same as the large, ovate-elliptic, papery leaves, it is often hairy on the lower surface. Fruits are globose. (pfaf.org)</p>			
14				
<b>Medicinal properties</b>				
Zack, 2020	Mshana and Addo- Fordjour	pfaf.org (consulted on the 13/03/20)		
<ul style="list-style-type: none"> <li>- Boasts immunity</li> <li>- Regulates blood pressure</li> <li>- Blood tonic</li> <li>- Purifies blood</li> </ul>	Not listed	<p>Vermifuge, promotes digestion, relieving bilious headaches and tooth aches <sup>1</sup></p> <p>Relieving of eyelid swell <sup>2</sup></p> <p>Eczema, ringworms and inflammation <sup>3</sup></p> <p>Bronchitis <sup>4</sup></p> <p>Diuretic: biliousness, bronchitis, urinary disorders <sup>5</sup></p> <p>Hair growth <sup>6</sup></p> <p>Anaemia, asthenia, fever, malaria, amoebiasis, schistosomiasis, tuberculosis <sup>7</sup></p> <p>Mycobacterium tuberculosis, bleeding of larynx, trachea, bronchi, or lungs and sore throat <sup>8</sup></p> <p>Scabies in children <sup>9</sup></p>		

<b>Type of preparation</b>		
Leaves: sobolo or tea, crush in clean water	-	<ol style="list-style-type: none"><li>1. Wood tar paste</li><li>2. Charred wood, soaked in poppy juice and made into a paste</li><li>3. Oil extracted from roots</li><li>4. Bark</li><li>5. Flowers</li><li>6. Oil extracted from seeds</li><li>7. Leaves</li><li>8. Extracts of the leaves</li><li>9. Oil from the tender shoots</li></ol>

<b>Latin name:</b>	<i>Mimosa pudica</i>	
<b>Other names:</b>	Morivivir, sensitive plant, Nantwimuawano (Fante)	
<b>Plant Family:</b>	Fabaceae	
<b>Habitat</b>	Common weed in the tropics.	
<b>Origin</b>	Native of tropical America	
<b>Characteristics</b>	Straggling weed; branchlets and petioles bristly - pilose or almost glabrous, the former prickly here and there; pinnae 1-2 pairs; leaflets sensitive, linear - oblong; stamens 4; fruits densely clustered, about 2 cm long, margins with stiff bristles. (Mshana et al., 2000)	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p.343)</b>	<b>Addo-Fordjour et al., 2012</b>
Used to bath children who feel weak (combined with <i>Anthocleista</i> )	Leaves: Dracontiasis <sup>1</sup>	Not listed
<b>Type of preparation</b>		
Squeeze leaves in water and bath child	B72 <sup>1</sup>	



#### Location at OPC

Everywhere

<b>Latin name:</b>	???	<b>16</b>
<b>Other names:</b>	Meat leaf (according to Zack)	
<b>Plant Family:</b>	Unknown	
<b>Habitat</b>		<small>Plant with palm</small> 
<b>Origin</b>		
<b>Characteristics</b>		
Climbing plant with palmatipartite leaves.		
<b>Location at OPC</b>		
Close to the waterhole		
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000</b>	<b>Addo-Fordjour et al., 2012</b>
- Strengthen immune system - Treats glaucoma		
<b>Type of preparation</b>		
Soup or stew, fresh part as salad (with Nunum and dandelion)		

<b>Latin name:</b>	<i>Gliricidia sepium</i>	
<b>Other names:</b>	Gliricidia	
<b>Plant Family:</b>	Fabaceae	
<b>Habitat</b>	<p>Grows best in warm, seasonally dry climates with 900-1500 mm annual rainfall and elevations 0 – 1200 m. (Elevitch and Francis, 2006)</p>	
<b>Origin</b>	Tropical dry forest of Mexico (Wikipedia)	
<b>Characteristics</b>	<p>It is a small to medium-sized, thornless tree which usually attains a height of 10-12 m. The bark is smooth but can vary in color from whitish grey to deep red-brown. The stem and branches are commonly flecked with small white lenticels. Leaves are odd pinnate, usually alternate, subopposite or opposite, to approximately 30 cm long; leaflets 5-20, ovate or elliptic, 2-7 cm long, 1-3 cm wide. Inflorescences appear as clustered racemes on distal parts on new and old wood, 5-15 cm long, flowers borne singly with 20-40 per raceme. Flowers bright pink to lilac, tinged with white, usually with a diffuse pale yellow spot at the base of the standard petal, calyx glabrous, green, often tinged red. Fruit green sometimes tinged reddish-purple when unripe, light yellow-brown when mature, narrow, 10-18 cm long, 2 cm wide (Simons and Stewart, 2007)</p>	
<b>Properties</b>		
<b>Zack, 2020</b>	<b>Mshana and Addo-Fordjour</b>	<b>Elevitch and Francis, 2006</b>
Nitrogen fixing, fertilization (Not edible, agricultural purpose)	Not listed	Fuelwood, fodder (food for animals), mulch/organic matter, intercropping (shade and organic matter for cacao, coffee, vanilla, tea, yam, ...)

<b>Latin name:</b>	<i>Vernonia amygdalina</i>	
<b>Other names:</b>	Bitter Leaf, Bonwene (Fante), Awonwone (Twi)	
<b>Plant Family:</b>	Asteraceae	
<b>Habitat</b>	Sun loving species extended over all inter-tropical Africa	
<b>Origin</b>	Tropical Africa ( <a href="http://southworld.net/africa-vernonia.amygdalina">southworld.net/africa-vernonia.amygdalina</a> )	
<b>Characteristics</b>	<p>Shrub, 3-8m high. Leaves oblong-lanceolate to narrowly elliptic-lanceolate, 7-15 cm long and 3-7 cm broad, gradually cuneate at the base, gradually acuminate at the apex, pubescent; inflorescence corymbiform with numerous capitula; floret white or bluish; pappus white or russet.</p> <p>(Mshana et al., 2000)</p>	
<b>Location at OPC</b>	In the medicinal plant garden	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p.123)</b>	<b>Addo-Fordjour et al., 2012</b>
- Malaria	<p><b>Leaves:</b> asthma<sup>1</sup>, cough<sup>2</sup>, fever<sup>3</sup>, oliguria<sup>4</sup>, headache<sup>5</sup>, helminthiasis<sup>6</sup>, abdominal pain<sup>7</sup>, pruritus<sup>8</sup>, dermatitis<sup>9</sup>, ringworm<sup>10</sup>, hypertension<sup>11</sup></p> <p><b>Roots:</b> cataract<sup>12</sup>, loss of appetite<sup>13</sup>, iritis<sup>14</sup>, constipation<sup>15</sup></p> <p><b>Leaves &amp; Roots:</b> hypertension<sup>16</sup></p> <p><b>Young leaves:</b> intestinal helminthiasis<sup>17</sup></p> <p><b>Leaves and stalk:</b> Psoriasis<sup>18</sup></p>	Asthma, cough, skin diseases, hypertension, fever
<b>Type of preparation</b>		
Tea, salad (very small), soup	J45.9 <sup>1</sup> , R05 <sup>2</sup> , R50.9 <sup>3</sup> , R34 <sup>4</sup> , R51 <sup>5</sup> , B53.9 <sup>6</sup> , R10.4 <sup>7</sup> , L29.9 <sup>8</sup> , L30.9 <sup>9</sup> , B35.9 <sup>10</sup> , I10 <sup>11</sup> // H26.9 <sup>12</sup> , R63.0 <sup>13</sup> , H20.9 <sup>14</sup> , K59.0 <sup>15</sup> // I10 <sup>16</sup> // B83.9 <sup>17</sup> // L40.9 <sup>18</sup>	



<b>Latin name:</b>	<i>Ficus asperifolia</i> (or <i>exasperata</i> ?)	
<b>Other names:</b>	Sandpaper plant, Onyannkyeren (Twi), Nyangele (Nzema), Tataputala (Ewe)	
<b>Plant Family:</b>	Moraceae	
<b>Habitat</b>	Common in secondary closed forest.	
<b>Origin</b>	Senegal to Sudan, south to Angola and the Congo (tropical.theferns.info/)	
<b>Characteristics</b>	A scrambling shrub or small tree up to 3.5 m high; with brownish-purplish branchlets; leaves scabrid, often lobed, variable, nearly entire, oblong-elliptic, or pinnately 3-5 lobed, 5-17 cm long, 2-8 cm broad. (Mshana et al., 2000)	
<b>Location at OPC</b>	In the medicinal plant garden	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p.433)</b>	<b>Addo-Fordjour et al., 2012</b>
Malaria Ringworm	<b>Leaves:</b> cancer (unspecified) <sup>1</sup> , headache <sup>2</sup> <b>Seeds:</b> fever <sup>3</sup> <b>Stem-bark:</b> haemorrhoids <sup>4</sup> , wound <sup>5</sup> <b>Plant:</b> hemorrhage <sup>6</sup>	<b>Bark:</b> cancer ( <i>Ficus exasperata</i> is also listed and its leaves are used against asthma, cataract, cough, cold, antihelminthic and the leaves and the latex are used against eyes sore, conjunctivitis, iritis, trachoma)
<b>Type of preparation</b>		
- Rub on body against ringworm and then use Acheampong and Nunum and <i>Cassia alata</i> to heal it - Tea	M80000/3 <sup>1</sup> , R51 <sup>2</sup> // R50.9 <sup>3</sup> // I84.9 <sup>4</sup> , T14.1 <sup>5</sup> // R88 <sup>6</sup>	

<b>Latin name:</b>	<i>Manihot esculenta</i>			
<b>Other names:</b>	Cassava, Bankye (Fante, Twi)			
<b>Plant Family:</b>	Euphorbiaceae			
<b>Habitat</b>	Widely cultivated as a food crop, it is not known in a truly wild situation (tropical.theferns.info/viewtropical.php)			
<b>Origin</b>	Native of Brazil			
<b>Characteristics</b>	<p>Shrub, 2-3 m high, with erect &amp; spreading branches, starting near the base and branching towards the extremities; leaves digitate, glaucous beneath, acuminate, lobed, sometimes to the base; lamina long petioled; flowers in terminal or subterminal racemes; bracts small, not longer than the pedicels.</p> <p>Fruits with 6 distinct wings or ridges. (Mshana et al., 2000)</p>			
20				
				
<b>Location at OPC</b>				
Many different spot				
<b>Medicinal properties</b>				
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p. 243)</b>	<b>Addo-Fordjour et al., 2012</b>		
<ul style="list-style-type: none"> <li>- Against snake bites</li> <li>- Gives blood when it is added in soups</li> </ul>	<p><b>Leaves:</b> fracture<sup>1</sup>, wound<sup>2</sup>, snake bite<sup>3</sup>, trichomoniasis<sup>4</sup></p> <p><b>Tubers:</b> intrapartum hemorrhage<sup>5</sup>, fresh wound<sup>6</sup></p> <p><b>Roots:</b> partial lactation failure<sup>7</sup>, threatened abortion<sup>8</sup></p>	<p><b>Leaf:</b> wound, haemorrhage, snakebite</p> <p><b>Leaf, root:</b> Blood, eye trouble</p>		
<b>Type of preparation</b>				
Chew the leaf and then put it on the bite	T14.2 <sup>1</sup> , T14.1 <sup>2</sup> , T630 <sup>3</sup> , A59.9 <sup>4</sup> // O67.0 <sup>5</sup> , T14.1 <sup>6</sup> // =92.4 <sup>7</sup> , O20.0 <sup>8</sup>			

<b>Latin name:</b>	<i>Cassia alata (= Senna alata)</i>	
<b>Other names:</b>	Bush empress candle plant	
<b>Plant Family:</b>	Leguminosae-Caesalpinoideae	
<b>Habitat</b>	<p>Found in many habitats, preferring disturbed, rather open vegetation such as roadsides, riverbanks, rain forest edges, lake shores, pond and ditch margins, open forest, orchards and around villages. (tropical.theferns.info)</p>	
<b>Origin</b>	Northern South America	
<b>Characteristics</b>	<p>Deciduous shrub or small tree with horizontal branches; it can grow up to 8 meters tall, but is commonly around 2 m. (tropical.theferns.info)</p> <p>The fruits are straight, up to 25 cm long, black and winged pods.</p> <p> Plant is poisonous if ingested in big quantities! (pfaf.org)</p>	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Dewi et al., 2019</b>	<b>Mshana &amp; Addo-Fordjour</b>
<ul style="list-style-type: none"> <li>- Cure of rashes, ringworms, eczema</li> <li>- Headaches</li> <li>- Cardiovascular diseases</li> <li>- Eases menstruation</li> </ul>	<ul style="list-style-type: none"> <li>- Constipation, Leprosy, Ringworm, Ophthalmic, Skin diseases, Liver disorders, antibacterial, blood purification</li> </ul>	Not listed.
<b>Type of preparation</b>		
Tea, crush fresh leaf on affected part	<b>Crude leaves</b> extracts: antibacterial, antifungal, antitumor <b>Petal extract:</b> antibacterial (gram +) <b>Leaves:</b> laxative (against constipation and blood purifying)	

	<p>The <b>leaves</b> are decocted, with or without <i>Persea americana</i>, as a treatment for biliousness and hypertension</p> <p>The <b>leaves</b> can be applied as a tincture; as a poultice; powdered, then mixed with oil as an ointment; or the sap can be spread over the affected area.</p> <p>An infusion of the <b>roots</b> is used in the treatment of diarrhoea, tympanites, uterus problems and filaria worm expulsion</p> <p>(pfaf.org) &lt;- More uses can be found on the website</p>	
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<b>Latin name:</b>	<i>Manguifera indica</i>	
<b>Other names:</b>	Mango, Mango (Fante / Twi)	
<b>Plant Family:</b>	Anacardiaceae	
<b>Habitat</b>	Cultivated trees in yards. It persists in abandoned fields and yards for decades. (levypreserve.org)	
<b>Origin</b>	Native of India, the plant has dispersed in Africa during the last century (Mshana et al., 2000)	
<b>Characteristics</b>	Cultivated fruiting tree with short-stacky bole and dense-ovate crown; leaves alternate-lanceolate, 20-30cm long and 3-6 cm broad with long petioles; inflorescence in terminal panicles with numerous little flowers yellowish or pink-greenish; fruit an ovate drupe, slightly reniform, with more or less fibrous pulp depending on the varieties. (Mshana et al., 2000)	
22		
<b>Location at OPC</b>		In the medicinal plant garden
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p.53)</b>	<b>Addo-Fordjour et al., 2012</b>
- Malaria	<b>Stem-bark:</b> cough <sup>1</sup> , diarrhoea <sup>2</sup> , hemorrhoids <sup>3</sup> , jaundice <sup>4</sup> , dental caries <sup>5</sup> <b>Root-bark:</b> diarrhoea <sup>6</sup> <b>Bark &amp; roots:</b> toothache <sup>7</sup> <b>Leaves:</b> Diabetes mellitus <sup>8</sup>	<b>Stem, Bark, Root:</b> cough, diarrhea, toothache, jaundice, fever <b>Leaf:</b> Diuretic, toothache <b>Leaf, bud, root:</b> fever <b>Leaf, Bark:</b> Sore gums
<b>Type of preparation</b>		
Tea	R05 <sup>1</sup> , A09 <sup>2</sup> , I84.9 <sup>3</sup> , R17 <sup>4</sup> , K02.9 <sup>5</sup> // A09 <sup>6</sup> // K08.8 <sup>7</sup> // E14 <sup>8</sup>	

<b>Latin name:</b>	<i>Hibiscus sp.</i> (the exact species is unknown)	
<b>Other names:</b>	-	
<b>Plant Family:</b>	Malvaceae	
<b>Habitat</b>	<p>Several hundred species are part of the genus <i>Hibiscus</i> and are native to warm temperate, subtropical and tropical regions throughout the world. (Wikipedia)</p>	
<b>Origin</b>	All over the world	
<b>Characteristics</b>	The species is not known...	
<b>Location at OPC</b>	In the medicinal plant garden.	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana and Addo-Fordjour</b>	<b>Wikipedia</b>
- Flower cleanses the blood	Not listed.	Tea made out of flowers of the <i>Hibiscus</i> genus is known for its high vitamin C content
<b>Type of preparation</b>		
Flowers: sobolo (cook it, use juice)		

<b>Latin name:</b>	<i>Terminalia catappa</i>	
<b>Other names:</b>	Indian almond	
<b>Plant Family:</b>	Combretaceae	
<b>Habitat</b>	<p>A mid-canopy tree in areas just inland from ocean beaches, near river mouths, and on coastal plains. These areas are typically flat, but they may have dunes or rocky bluffs. Sandy or rocky beaches. (pfaf.org)</p>	
<b>Characteristics</b>	<p>The tree grows to 35m tall, with an upright, symmetrical crown and horizontal branches. It has corky, light fruit that are dispersed by water. The seed within the fruit is edible when fully ripe, tasting almost like almond. As the tree gets older, its crown becomes more flattened to form a spreading, vase shape. Its branches are distinctively arranged in tiers. The leaves are large, 15–25 cm long and 10–14 cm broad, ovoid, glossy dark green, and leathery. They are dry-season deciduous; before falling, they turn pinkish-reddish or yellow-brown, due to pigments such as violaxanthin, lutein, and zeaxanthin. The trees are monoecious, with distinct male and female flowers on the same tree. Both are 1 cm in diameter, white to greenish, inconspicuous with no petals; they are produced on axillary or terminal spikes. The fruit is a drupe 5–7 cm long and 3–5.5 cmk broad, green at first, then yellow and finally red when ripe, containing a single seed (Wikipedia)</p>	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000</b>	<b>Addo-Fordjour et al., 2012</b>
<ul style="list-style-type: none"> <li>- Leaves against malaria</li> <li>- Oil from seed to cook cholesterol free</li> <li>- Oil for skin and hair</li> </ul>	Not listed.	<b>Leaf:</b> Typhoid fever
<b>Type of preparation</b>		
Dried leaves in tea against malaria		?

<b>Latin name:</b>	<i>Catharanthus roseus</i>	
<b>Other names:</b>	Madagascar Periwinkle	
<b>Plant Family:</b>	Apocynaceae	
<b>Habitat</b>	Naturalised herb, often cultivated in homes or sometimes growing wild (Mshana et al., 2000)	
<b>Origin</b>	Originates from Madagascar but has been cultivated for centuries in all the tropics. (uses.plantnet-project.org)	
<b>Characteristics</b>	An annual or perennial herb, sometimes with woody base; leaves simple, opposite, obovate to oblanceolate, entire; flowers white or pink, terminal or axillary; corolla tube 1.5 - 3 cm, the lobes broadly obovate; fruits a pair of narrow-fusiform follicles, 2-4 cm long	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p.75)</b>	<b>Addo-Fordjour et al., 2012</b>
- Not edible - Against inflammation and rashes - Against bites of other people	<b>Flowers:</b> hypertension <sup>1</sup> , whooping cough <sup>2</sup> <b>Leaves &amp; Roots:</b> Jaundice <sup>3</sup>	Not listed
<b>Type of preparation</b>		
Grind leaves on a rock until it becomes very smooth, add water and put on affected place	I10 <sup>1</sup> , A37.9 <sup>2</sup> // R17 <sup>3</sup>	

**Location at OPC**

Around the vegetable garden.

<b>Latin name:</b>	Name unknown (neither by P.Ekpe – a dried part of the plant should be brought to him)	<b>26</b>	
<b>Other names:</b>	Also unknown		
<b>Plant Family:</b>	...		
<b>Habitat</b>			
-			
<b>Origin</b>			
-			
<b>Characteristics</b>			
-			
<b>Location at OPC</b>			
Medicinal plant garden			
<b>Medicinal properties</b>			
<b>Zack, 2020</b>	<b>Mshana et al., 2000</b>	<b>Addo-Fordjour et al., 2012</b>	
- Roots used against rashes - Roots used to give red color to leather	-	-	
<b>Type of preparation</b>			
Skin of the roots to the affected part	-	-	

<b>Latin name:</b>	Name unknown (neither by P.Ekpe – a dried part of the plant should be brought to him)	<b>27</b>	
<b>Other names:</b>	Chewing sticks		
<b>Plant Family:</b>	...		
<b>Habitat</b>			
-			
<b>Origin</b>			
-			
<b>Characteristics</b>			
-			
<b>Location at OPC</b>			
Medicinal plant garden			
<b>Medicinal properties</b>			
<b>Zack, 2020</b>	<b>Mshana et al., 2000</b>	<b>Addo-Fordjour et al., 2012</b>	
Strengthen teeth	-	-	
<b>Type of preparation</b>			
Branches as chewing sticks	-	-	

<b>Latin name:</b>	<i>Anthocleista sp.</i> (the exact species is not known – the genus was given by P.Ekpe – <i>Anthocleista nobilis</i> is presented) This tree is one of several species in the genus that are much used in traditional medicine and for similar medicinal purposes. They may all be used as substitutes for each other.	<b>28</b>	
<b>Other names:</b>	Owudifo Kete (twi)		
<b>Plant Family:</b>	Loganiaceae		
<b>Habitat</b>			
2 species of this genus are found in secondary forests (Mshana et al., 2000)			
<b>Origin</b>			
Western Tropical Africa - Senegal east to the Central African Republic. (tropical.theferns.info)			
<b>Characteristics</b>			
A tree about 8-20m high with spiny stem; leaves conspicuously discolourous, usually sessile, 15-45cm long, 6-20 cm broad, margin revolute and undulate; flowers white; mature corolla in bud usually less than 5 times as long as the calyx. (Mshana et al., 2000)			
<b>Location at OPC</b>			
Several different individuals, easy to recognize			
<b>Medicinal properties</b>			
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p. 391)</b>	<b>Addo-Fordjour et al., 2012</b>	
Used with <i>Mimosa pudica</i> to bath children Root for treatment of piles (painful waist)	For <i>Anthocleista nobilis</i> : <b>Roots:</b> hemorrhoid <sup>1</sup> , constipation <sup>2</sup> <b>Roots &amp; bark:</b> infective hepatitis <sup>3</sup>	<b>Root, stem, bark:</b> Catarrh, hemorrhoids, laxative, constipation, hepatitis, syphilis <b>Bark:</b> antihelminthic, colic, wounds, dysmenorrhea, stomachache <b>Root:</b> piles <b>Young shoots:</b> ulcers	
<b>Type of preparation</b>			
	184.9 <sup>1</sup> // K59.0 <sup>2</sup> // B15.9 <sup>3</sup>		

<b>Latin name:</b>	<i>Aloe vera</i>			
<b>Other names:</b>	-			
<b>Plant Family:</b>	Asphodelaceae			
<b>Habitat</b>				
Maritime sands and rocks (tropical.theferns.info)				
<b>Origin</b>				
Only known as a cultivated or naturalized plant, it is generally presumed to have originated in Arabia, Somalia or Sudan. (tropical.theferns.info)				
<b>Characteristics</b>				
Aloe vera is a succulent, evergreen perennial herb that can be stemless or with a short stem up to 30cm long; it can produce a flowering stem up to 160cm tall. Freely suckering, it produces dense rosettes of 16 - 20 long pointed leaves from shortly branched creeping rhizomes. (tropical.theferns.info)				
<b>Location at OPC</b>				
In a pot close to the eating table				
<b>Medicinal properties</b>				
<b>Zack, 2020</b>	<b>Mshana and Addo-Fordjour</b>	<b>Tropical.theferns.info</b>		
- Hair - Piles and waist pains	Not listed	Anti-inflammatory & Woundhealing (against burns and wounds)		
<b>Type of preparation</b>				
Take liquid from leaves and put it on the affected part. Grind and pump in buttocks --> against piles and waist pains	-	To obtain this gel, the leaves can be cut in half along their length and the inner pulp rubbed over the affected area of skin. This has an immediate soothing effect on all sorts of burns and other skin problems (tropical.theferns.org)		

<b>Latin name:</b>	<i>Persea americana</i>	
<b>Other names:</b>	Pee (twi), Pae (Fante), Avocado pear	
<b>Plant Family:</b>	Lauraceae	
<b>Habitat</b>	<p>Only known in cultivation (Mshana et al, 2000)</p> <p>Humid lowland forests on limestone formations (tropical.theferns.info)</p>	
<b>Origin</b>	Central America – Mexico (Mshana et al. 2000)	
<b>Characteristics</b>	<p>A tree to 10m high; leaves up to 22cm long and 4 cm broad in tufts near ends of twigs and rather aromatic when crushed; fruits green, yellow, or purple, round or pear-shaped.</p>	
<b>Location at OPC</b>	Agroforestry	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000</b>	<b>Addo-Fordjour et al., 2012</b>
- Supports bones - Weak children should eat avocado	Stem bark: hypertension <sup>1</sup>	Leaf & dry leaf: hypertension
<b>Type of preparation</b>		
Eating fruits	I10 <sup>1</sup>	



<b>Latin name:</b>	<i>Euphorbia sp.</i> (the exact species is not known – the genus was given by P.Ekpe)	<b>31</b>	
<b>Other names:</b>	Unknown		
<b>Plant Family:</b>	Euphorbiaceae		
<b>Habitat</b>			
-			
<b>Origin</b>			
-			
<b>Characteristics</b>			
-			
<b>Location at OPC</b>			
Close to the eating table			
<b>Medicinal properties</b>			
<b>Zack, 2020</b>	<b>Mshana et al., 2000</b>	<b>Addo-Fordjour et al., 2012</b>	
Deflects the lightning			

<b>Latin name:</b>	<i>Euphorbia hirta</i>	
<b>Other names:</b>	Animakoa (twi), Ahenkodze (Fante), Aakuba (Nzema), Notsigbe, Lume (Ewe)	
<b>Plant Family:</b>	Euphorbiaceae	
<b>Habitat</b>	Wild species growing in various areas, along roads particularly on waste grounds and in old cultivation; pantropical. (Mshana et al., 2000)	
<b>Origin</b>	Probably originating in tropical America (tropical.theferns.info)	
<b>Characteristics</b>	Herbaceous plant, erect or prostrate, 20-30 cm high, pubescent; leaves opposite, asymmetric at base, rounded on one side, cuneate on the other, sharp on top, 5cm long and 2 cm broad, finely dentate; inflorescence axillary; flowers small, yellowish; fruit small, capsules hairy. (Mshana et al., 2000)	
<b>Location at OPC</b>	In the vegetable garden (but probably everywhere)	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p. 235)</b>	<b>Addo-Fordjour et al., 2012</b>
Leaf and flower are used against diabetes and eye problems	<b>Whole plant:</b> intestinal obstruction <sup>1</sup> , prenatal care <sup>2</sup> ,	Not listed.



The sap contains a latex which is toxic on ingestion and highly irritant externally, causing photosensitive skin reactions and severe inflammation, especially on contact with eyes or open cuts. The toxicity can remain high even in dried plant material. Prolonged and regular contact with the sap is inadvisable because of its carcinogenic nature. (tropical.theferns.info)

	<p>amoebiasis<sup>3</sup>, diarrhoea (infantile)<sup>4</sup>, gonorrhoea<sup>5</sup>, male sexual impotence<sup>6</sup>, wound<sup>7</sup>, lactation failure<sup>8</sup>, threatened abortion<sup>9</sup>, vomiting<sup>10</sup>, constipation<sup>11</sup>, enurensis<sup>12</sup></p> <p><b>Leaves:</b> boils<sup>13</sup>, cough<sup>14</sup>, diarrhoea<sup>15</sup>, dracontiasis<sup>16</sup></p> <p><b>Shoots:</b> asthma<sup>17</sup>, gonorrhoea<sup>18</sup></p> <p><b>Stems:</b> visual disturbance<sup>19</sup></p>	
<b>Type of preparation</b>		
Eat the flower with soft coconut	R56.6 <sup>1</sup> , Z34.9 <sup>2</sup> , A226.9 <sup>3</sup> , A09 <sup>4</sup> , A54.9 <sup>5</sup> ,	
Make soup with leaves	F52.2 <sup>6</sup> , T14.1 <sup>7</sup> , O92.4 <sup>8</sup> , O20.0 <sup>9</sup> , R11 <sup>10</sup> , K59 <sup>11</sup> , R32 <sup>12</sup> // L02 <sup>13</sup> , O5 <sup>14</sup> , A09 <sup>15</sup> , B72 <sup>16</sup> // J45.9 <sup>17</sup> , A54.9 <sup>18</sup> // H53.9 <sup>19</sup>	

<b>Latin name:</b>	<i>Psidium guava</i>			
<b>Other names:</b>	Guava (english), Eguabe (Fante), Aduoba (Nzema), Oguawa (Twi)			
<b>Plant Family:</b>	Myrtaceae			
<b>Habitat</b>				
Common in disturbed places often forming thickets in pastures, plantations and other similar habitats in the Pacific Islands. (tropical.theferns.info)				
<b>Origin</b>				
Species native in south America, introduced and cultivated in all tropical regions. (Mshana et al., 2000)				
<b>Characteristics</b>				
Shrub, 5-8m high, leaves simple, opposite, entire, ovate, 3-5 cm long and 2.5-4 cm broad, glabrous; 8 to 15 prominent lateral nerves beneath; inflorescence in axillary cyme or solitary flowers; flowers white, pedunculate, 1.5-2 cm diameter; fruits spherical berry with persistent sepals, pulp white or pink, seeds small and numerous. (Mshana et al., 2000)				
<b>Medicinal properties</b>				
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p.447)</b>	<b>Addo-Fordjour et al., 2012</b>		
Boasts immune system and acts for a natural cleansing	<b>Leaves, stem bark, roots:</b> diarrhoea <sup>1</sup> <b>Leaves:</b> chronic diarrhoea <sup>2</sup> , cough <sup>3</sup> , painful urination <sup>4</sup> , measles <sup>5</sup> , toothache <sup>6</sup> , herpes zoster <sup>7</sup> <b>Fruits:</b> pharyngeal abscess <sup>8</sup> , constipation <sup>9</sup> <b>Stem-bark:</b> boils <sup>10</sup>	<b>Leaf:</b> Typhoid fever, measles, cough <b>Root:</b> diarrhea <b>Ripe fruit:</b> purgative <b>Leaf, root:</b> fever, blood tonic		
<b>Type of preparation</b>				
Tea	A09 <sup>1</sup> // A06.1 <sup>2</sup> , R05 <sup>3</sup> , R30.9 <sup>4</sup> , B05.9 <sup>5</sup> , R08.8 <sup>6</sup> , R02.9 <sup>7</sup> // J39.1 <sup>8</sup> , K59.0 <sup>9</sup> // L02.9 <sup>10</sup>			

**Location at OPC**

In the agroforestry

<b>Latin name:</b>	The latin name is not known	
<b>Other names:</b>	Spice tree	
<b>Plant Family:</b>	-	
<b>Habitat</b>	<b>Make picture (ask Zack)</b>	
-		
<b>Origin</b>		
-		
<b>Characteristics</b>		
-		
<b>Location at OPC</b>		
There is no spice tree at OPC (and since the latin name is not known, no picture is available)		
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000</b>	<b>Addo-Fordjour et al., 2012</b>
Roots are good for the immune system of young children		
<b>Type of preparation</b>		
Roots cooked as tea and mix the juice with porridge (because it is bitter)		

<b>Latin name:</b>	<i>Tetrapleura tetraptera</i>	
<b>Other names:</b>	Prekese (twi), Esem (Fante)	
<b>Plant Family:</b>	Fabaceae	
<b>Habitat</b>	Mostly secondary formations (Mshana et al., 2000)	
<b>Origin</b>	Guinea-Congolese species, widespread over all inter-tropical Africa (Mshana et al., 2000)	
<b>Characteristics</b>	<p>Tree, 15-20m high with dark green leaves; leaves compound-bipinnate, 5-9 pairs of pinna, 5 to 12 pairs of alternate leaflets; leaflets oblong-elliptic, subsessile, rounded at each end, sometimes slightly emarginate, 1-2 cm long, 0.5-1 cm broad, finely pubescent at lower side; inflorescence in axillary spike, solitary or by two; the fruits winged pods, 15 cm long.</p> <p>(Mshana et al., 2000)</p>	
  		
<b>Location at OPC</b>		In front of the kitchen
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p. 349)</b>	<b>Addo-Fordjour et al., 2012</b>
<ul style="list-style-type: none"> <li>- Blood</li> <li>- Boasts immune system</li> <li>- Cures stroke</li> <li>- Glauchoma</li> </ul>	<p><b>Bark:</b> gastric ulcer<sup>1</sup>, dysentery<sup>2</sup>  <b>Fruit:</b> malaria<sup>3</sup></p>	<p><b>Bark, fruit:</b> Hypertension, stomachache  <b>Bark:</b> emetic, purgative  <b>Fruit:</b> fever, intoxicant, rheumatism</p>
<b>Type of preparation</b>		
Grind fruit into powder and add it to any food, drink, ...	K25.9 <sup>1</sup> , A09 <sup>2</sup> B54 <sup>3</sup>	

<b>Latin name:</b>	The latin name is not known (but the picture was not shown to mister Ekpe)	
<b>Other names:</b>	Boko-boko, kutub3t3w, mmfa	
<b>Plant Family:</b>	?	
<b>Habitat</b>		
?		
<b>Origin</b>		
?		
<b>Characteristics</b>		
?  This is the plant Christian calls meat leaf, but according to Zack, number 16 is meat leaf		
<b>Location at OPC</b>		
In the vegetable garden.		
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000</b>	<b>Addo-Fordjour et al., 2012</b>
- Against diabetes	?	?
<b>Type of preparation</b>		
Steam leaves and add it to the already prepared stew or soup	?	?

<b>Latin name:</b>	<i>Dissotis rotundifolia</i> (ask Zack if correct!)	
<b>Other names:</b>	Boreadaso, Borekete, Obommofawaw (Twi)	
<b>Plant Family:</b>	Melastomataceae	
<b>Habitat</b>	<p>Wet locations throughout the forest-zone, favouring secondary jungle, commonly appearing in second- and third-year bush fallow. Old cultivated land, palm-plantations, swamps, watersides; grassland, at elevations up to 1,200 metres. (tropical.theferns.info)</p>	
<b>Origin</b>	Guineo-Congolese species (Mshana et al., 2000)	
<b>Characteristics</b>	<p>Decumbent herb; stem pilose rooting at the nodes, leaves opposite, shortly ovate, up to 2-4 cm long and 10-25 mm broad, shortly cuneate at base, petiole 5-25 mm long, hairy; flowers in 2 or 3 (or solitary according to Wikipedia) at the apex of axillary branchlets, calyx tube more or less densely covered with simple and / or plumose bristles; seeds with concentric ridges, pitted in centre.</p>	
<b>Medicinal properties</b>		
<b>Zack, 2020</b>	<b>Mshana et al., 2000 (p. 411)</b>	<b>Addo-Fordjour et al., 2012</b>
We did not discuss it → ask!	<p><b>Whole plant:</b> abdominal pains<sup>1</sup>, diarrhea<sup>2</sup>, poisoning<sup>3</sup>, gonorrhea<sup>4</sup>, rheumatism<sup>5</sup>, prenatal care<sup>6</sup></p> <p><b>Leaves:</b> cough<sup>7</sup>, orthitis<sup>8</sup></p> <p><b>Leafy stem:</b> asthma<sup>9</sup></p> <p><b>Roots:</b> oliguria<sup>10</sup></p>	<p><b>Leaf &amp; Root:</b> abdominal pain, diarrhea</p> <p><b>Leaf:</b> iritis, conjunctivitis, trachoma, eyes sore</p> <p><b>Dry leaf:</b> cold, cough</p> <p><b>Whole plant:</b> sinusitis</p>
<b>Type of preparation</b>		
	R10.4 <sup>1</sup> , A09 <sup>2</sup> , T65.9 <sup>3</sup> , A54.9 <sup>4</sup> , M79.0 <sup>5</sup> , Z34.9 <sup>6</sup> // R05 <sup>7</sup> , M13.9 <sup>8</sup> // J45.9 <sup>9</sup> // R34 <sup>10</sup>	

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