



*Ethnobotany of African
Garcinia Plants*

2.1 Introduction

Medicinal plants play an important role in the healthcare systems all over the world.

Around 80% of general population in the world uses plants to treat several illnesses (UICN, OMS, WWF, 1993). Ethnobotanical studies are very important to reveal the past and present culture about plants. Human societies throughout the world have accumulated a vast body of indigenous knowledge over centuries on medicinal uses of plants, and for other related uses including poison for fish and hunting, purifying water, and for controlling pests and diseases of crops and livestock.

In this respect, people are able to use and conceptualize plants in their local environments. For instance, medicinemen or herbalists have a good knowledge on botanical description including correct identification of plants for intended purposes. Hence, ethnobotany details the knowledge of plants by the local people and their usefulness as understood by the people of a particular ethnic group (Tor-Anyiin et al., 2003), particularly this study involves the scientific study of the traditional knowledge and customs of a people concerning plants and their medical, religious, and other uses.

2.2. Ethnopharmacology of African *Garcinia* Plants

Many African *Garcinia* species have been reported to be used in traditional medicine for many centuries. Some of them have been studied and reported to have many ethnomedical uses. Among the effects reported are the treatment of head and abdomen pains, fever, ulcers, impotence, throat and bronchial infections, venereal diseases, diarrhea, hepatitis, asthma rheumatism, arthritis,

cancer, liver cirrhosis and cough (Table 3). Many literatures indicated *Garcinia kola*, a plant reported to grow in many Western African countries, to be the most studied *Garcinia* species in all aspects, including ethnomedical use, pharmacology and its phytochemistry. Sometimes, it is referred to as a “wonder plant” because every part of it has been found to be of medicinal importance (Dalziel, 1937). Ethnomedically, many *Garcinia* plants are used as a decoction, an infusion or as a juice. Most extracts are prepared with cold or hot water and are applied for the treatment of toothache, inflammations, for wound-healing, jaundice, ulcers, dysentery, as aphrodisiac, for fever, sleeping sickness, venereal diseases, liver cirrhosis, arthritis and respiratory track diseases. Other *Garcinia* plants are used as chewing sticks, fertilization stimulant, aid childbirth while some fresh or dried fruits are used as food. For instance, *G. livingstoneii* is commonly known as an ‘African mangosteen’ as it produces very tasty and delicious fruits while the powdered root is used as an aphrodisiac (Anorl & Gulumian, 1984). Hence, many *Garcinia* plants are known for different traditional uses (Table 3) while others are not reported for any ethnomedical use.

Table 3. Traditional uses of some *Garcinia* plant species growing in Africa.

S/N	Scientific name	Where collected	Part used	Traditional uses	Reference
1	<i>G. afzelii</i>	Ghana	Stem wood	Impotence, chewing stick	Adu-Tutu <i>et al.</i> (1979)
		Guinea	Root bark	Cure aphrodisiac	Vasileva (1969)
2	<i>G. buchananii</i>	Tanzania	Stem bark	Diarrhoea, dysentery, abdominal discomfort, pains	Balemba <i>et al.</i> (2010)
				impotence, chewing stick	
3	<i>G. epunctata</i>	Ghana	Stem wood	Aphrodisiac	Adu-Tutu <i>et al.</i> (1979) Watt and Breyer-Brandwijk (1962)
5	<i>G. kola</i>	South Africa	Stem bark	Used for insanity	Mathias (1982)
		Tanzania	Stem bark +Root bark	Treat sleeping sickness	Freiburghaus, <i>et al.</i> (1996)
		DR Congo	Stem bark	Cure venereal diseases, sores, bronchitis, measles, dermatitis and as aphrodisiac	Bakana <i>et al.</i> (1987)
		Nigeria	Stem bark	Used for fever, inflammation, cough, anthelmintic and respiratory track diseases	Gill and Akinwumi (1986)
			Dried Fruit	Treat arthritis	Iwu & Anyanwu (1982)
			Fresh fruit	Used as food	Ebana <i>et al.</i> (1991)
			Dried fruitpeel	Used as an antiseptic for cuts and sore throats	Iwu <i>et al.</i> (1990)
			Dried root	Used as a chewing stick, Treat liver cirrhosis, inflammation of the respiratory tract, coughs	Fadulu (1975) Iwu <i>et al.</i> (1990)
				Used for cough, tooth decay, gonorrhoea (roots soaked in local gin)	Ebana (1991)
			Seed	Used as fertilization stimulant	Elujoba (1995)

S/N	Scientific name	Where collected	Part used	Traditional uses	Reference	
6	<i>G. livingstoneii</i>	Tanzania	Dried seed	Used as a masticatory, antidote and inflammatory disorders Treat cough, abdominal colic, aphrodisiac and catarrh Treat diarrhoea, hepatitis, dysmenorrheal, gastroenteritis and asthma Treat bronchitis, diarrhoea, and throat infections	Iwu <i>et al.</i> (1990) Akintonwa and Essien (1990) Braide (1989) Adesina <i>et al.</i> (1995); Orie and Ekon (1993), Iwu 1993.	
			Fruit	Used as food	Johns <i>et al.</i> (1984)	
			Venda (RSA)	Leaf	Used for toothache, impotency and aphrodisiac	Anorld and Gulumian (1984)
			Kenya	Root	Used to aid Childbirth	Yu <i>et al.</i> (1982)
			Somalia	Root	Treat abdomen pains	Samuelsson <i>et al.</i> (1992)
7	<i>G. lucida</i>	Tanzania	Root	Used as an aphrodisiac To treat gastric infections, antidote against poison, aphrodisiac properties	Palgrave <i>et al.</i> (2002)	
			Stem	Treat stomach ulcers and liver diseases	Fotie <i>et al.</i> (2007)	
8	<i>G. mangostana</i>	Madagascar	Leaf	Used for dressing wounds	Novy (1997)	
9	<i>G. polyantha</i>	Cameroon	Sap (latex)	Treat headache	Bouquet (1969)	
10	<i>G. punctata</i>	Gabon	Stem bark	Antidote, chew-stick and laxative	Akendengue and Louis (1994)	
10	<i>G. smeathmannii</i>	Cameroon	Stem bark	Ophtalmia (eye treatments)	Bouquet, 1969	
			Sap (latex)	Skin, mucosae	Bouquet, 1969	
			Bark latex		Bouquet, 1969	

