Plants used for medicinal purposes by the Koma people of Adamawa State, Nigeria

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In the Alantika Mountains, which stretch between 8.50° and 9.00°N latitude and 12.3 and 12.50°E longitude, in the border area between Nigeria and the Republic of Cameroon, live the Koma people. In Nigeria, the Alantika Mountains stretch 50 km eastward from Lendo village to the Benue valley at Gbaji village. The highest peak is 4000 ft. The Koma people live scattered over the mountain top. They are predominantly farmers and hunters. The fertile soils of the area support drought-resistant crops like sorghum and millet. Other crops are cultivated on the plain: namely groundnut, rice and plantain. The Koma rear goats and chickens and they keep dogs to protect their homes. Not much is known about the origin of the Koma; they themselves are of the opinion that war and soil infertility drove them to leave Cameroon and settle in the safer area now called Koma (meaning 'we shall return').

The present project was designed to investigate how the Koma people survive health-wise, living isolated as they do, without access to public health clinics. The first stage of the project to identify the ethno-medicinal practices of the Koma people was to document their knowledge and identify the plants they use for medicinal purposes. The result might be the preservation of unique indigenous knowledge which could disappear if it is not documented. This will have to be decided upon at a later stage.

The research was carried out by Dr Idu MacDonald and D.I. Olorunfemi of the Department of Botany, University of Benin, Nigeria. One hundred informants were asked about the medicinal plants they use. The informants included full-time and part-time herbalists, old men and women, family heads, and the village head. The information they supplied and their answers to specific questions were recorded. If at least two informants
independently reported using a particular plant to treat a particular disease, the data were considered to be reliable. Samples of the plant parts used by the informants were collected and identified.

Although the research at this stage had a predominantly botanical focus, the findings are presented here under the diseases or ailments for which the Koma use the plant, with an indication of which parts are used. The plants listed are generally used for one or more purposes. It is also common for a number of plants to be combined for the effective control of one ailment.

Plant names are given in English if there is an English name. This is followed by the local name (in bold italics) and the full botanical name.

**Malaria**

Leaf of cashew tree **mashichada** (*Anacardium occidentale* L., Anacardiaceae); banana **ayaba** (*Musa sp.*, Musaceae); leaves and fruit of papaya **gwada** (*Carica papaya* L.; Caricaceae); leaf and bark of mango **mangoro** (*Mangifera indica* L., Anacardiaceae); neem **dogonyaro** (*Azadirachta indica* A. Juss, Meliaceae); African mahogany **opi** (*Khaya senegalensis* (Desr.) A. Juss, Meliaceae); bark of coral bush **kowule** (*Erythrina senegalensis* DC., Papilionoideae); and fig tree **gambo** (*Ficus vallis-choudae* Del., Moraceae).

**Diarrhoea**

Root, bark and fruits of horseradish tree, also called Ben-oil tree, or drumstick tree **zogole** (*Moringa oleifera* Lam., Moringaceae); bark of Egyptian thorn tree, or prickly acacia **buldagl** (*Acacia nilotica* (L.) Willd ex Delile, Mimosoideae); stem and tuber of yam **katidali** (*Dioscorea composita* Hemsl., Dioscoreaceae).

**Gastroenteritis**

Leaf of common bitterleaf **gwuchzaali** (*Vernonia amygdalina* Del., Asteraceae); bark of African canarium, or incense tree **atile** (*Canarium schweinfurthii* Engl., Burseraceae).

**Dysentery**

Leaf of sheanut tree **bulanga** (*Vitellaria paradoxa* Gaertner f., Sapotaceae); **bal** (*Grewia vensuta* Fres., Tiliaceae); leaf and stem of devil's thorn **tedo** (*Tribulus terrestris* L., Zygopollaceae).
Gonorrhea
Leaf of tallow tree *jangel* (*Detarium microcarpum* Guill. & Perr., Caesalpinioideae); root of *wujango* (*Nauclea pobeguinii* (Pobeguin ex Pellegr.) Petit, Rubiaceae).

Dermatitis (skin disease)
Leaf and stem of asthma weed *kumama* (*Euphorbia hirta* L., Euphorbiaceae); spreading hogweed, or spiderling *gogomashu* (*Boerhaavia diffusa* L., Nyctaginaceae); *cauli* (*Sapium grahama*ii (Staff) Pax, Euphorbiaceae); leaf of cutleaf groundcherry *nujechada* (*Physalis angulata* L., Solanaceae).

Burns
Leaf of nodeweed *laachada* (*Synedrella nodiflora* L., syn. *Verbesina nodiflora* L., Asteraceae); root stem and stem bark of hog plum, tallow wood *shamaigoro* (*Ximenia americana* L., Olacaceae).

Snake / scorpion bite - Anti-venom
Leaf of black plum *wawo* (*Vitex doniana* Sweet, Verbenaceae); root of calendula *zani* (*Calendula arvensis* L., Asteraceae).

Cough
Leaf and bark of *watcuto* (*Pergularia daemia* (Forsk.) Chiov., Asclepiadaceae); *tasu* (*Anogeissus leiocarpa* (DC.) Guillemin & Perrottet, Combretaceae); root of *andra* (*Albuca nigrum* L., Liliaceae).

Vermifuge (worm expeller)
Leaf and stem of garlic *alubaza* (*Allium sativum* L., Liliaceae); root bark of confetti tree *yoi* (*Maytenus senegalensis* (Lam.) Exell., Celastraceae).

Rheumatism / pains
Leaf of common bitterleaf *gwuchzaali* (*Vernonia amygdalina* Del., Asteraceae); leaf and stem bark of *watcuto* (*Pergularia daemia* (Forsk.) Chiov., Asclepiadaceae); root bark of Ilorin balsam *tugada* (*Daniellia oliveri* Hutch & Dalz., Caesalpinioideae).

Hypertension
Stem bark of *wangula* (*Cassia goratensis* Fres., Caesalpinioideae).

Mental disorder
Root of fibre tree *voly* (*Securidaca longipedunculata* Fres., Polygalaceae).
Conjunctivitis
Leaf of ber *yago* (*Ziziphus mauritiana* Lam., Rhamnaceae).

Bilharzia
Root of ginger *magoni* (*Zingiber officinale* Rosc., Zingiberaceae).

Up to now research has concentrated on identifying the common plants used for different diseases. The first contact was promising but not conclusive as the cultural gap between indigenous and scientific knowledge is vast and sometimes very difficult to bridge even when the research is carried out in an atmosphere of trust and open-mindedness aimed at mutual understanding. Research in this region was quite difficult due to the difficult terrain of the towns in Koma. But in spite of all this, the second part of this research has just been completed.

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