

## Full Length Research Paper

# Some medicinal plants of Arabian Peninsula

Saganuwan, Alhaji Saganuwan

Department of Veterinary Physiology, Pharmacology and Biochemistry, College of Veterinary Medicine, University of Agriculture, Makurdi, Benue State, Nigeria. E-mail: [pharn\\_saga2006@yahoo.com](mailto:pharn_saga2006@yahoo.com).  
Tel: +2348027444269, +2347039309400.

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**Many nations of the world have traditional medicine. Arabs were the first to distil alcohol. The existence and use of plants to treat human diseases is as old as man. Some plants have opportunity, either to be or of being transferred from their original natural environment to another. To determine whether traditional medicines were available for the treatment of diseases in Arabian Peninsula, a literature review of the plants used by Arabs was completed which led to identification of about 150 medicinal plants used in the treatment of human diseases in the Peninsula. Some of the listed plants are already available in Nigeria perhaps as a result of interaction between Arabs/Jews from Middle East and Arab-Barbas, Tuaregs, Fulanis and Hausas in Africa through trans Sahara trade and pilgrimages.**

**Key words:** Medicinal plants, Arabs, Middle East.

## INTRODUCTION

Many nations of the world have traditional medicine. World wide between 50,000 and 80,000 flowering plants are used medicinally (IUCN species survival commission, 2007; Marinelli, 2005). Many ancient nations have awoken to the importance of herbal medicine and every patient should be treated with plants of his land, it brings more cures (Ashur, 1986). Plants and drugs to fight life-threatening diseases such as diabetes, asthma, hypertension, human immunodeficiency virus/acquired immunodeficiency syndrome (HIV), and diarrhoea are being developed from plants from African countries such as Egypt, Somalia, Libya, Gambia (Barnett, 2006) and Nigeria (Saganuwan, 2009). More than 80% of South Asian's (1.4 billion people) have no access to modern health care; they rely instead on traditional medicine using native species (Robertson, 2008). Arabian Peninsula is a large area of land which is surrounded by Arabian Sea on the east, red sea on the west with the bay between and Mediterranean Sea on the north (Ash, 2005). It is surrounded from the north by Syria, Jordan, Iraq and Kuwait and from the South by Indian Ocean. It covers about one-quarter of Europe (Ahmad et al., 1983). People that live in the Peninsula are predominantly Arabs, followed by Persians and the Jews (Ash, 2005). Despite human medicine was well developed in Asian minor during antiquity (Davis, 1988) the existence and use of plants to treat diseases is as old as man. Man's dependence on plant has in no way decreased, yet there are comprehensive documentations of the plants

exploited for their medicinal uses in some parts of the world (Mann et al., 2003). The ratios of traditional doctors to patients in Kenya, South Africa, Swaziland, Tanzania, Uganda and Zimbabwe are 1:987, 1:1200, 1:100, 1:450, 1:708, and 1:966 respectively. But the ratios of medical doctors to patients in Ethiopia, Somalia and Sudan are 1:33000, 1:216539 and 1:11000 respectively and the entire Eritrea had only 120 medical doctors as at 1995 (De Smet Peter, 1999) pointing to the need for alternative medicine. However, some ethnic groups of the world are not aware of the plants used to treat some ailments in other ethnic groups. Because of migration due to war, hunger, business and other purposes, some plants stand chance of being transferred from one ecological environment to another and such plants may not be known by the people of that environment. In view of this, a literature review of some plants used by Arabs in the treatment of human diseases was carried out with intent to providing other ethnic groups of the world with the information about medicinal values of those plants.

## MATERIALS AND METHODS

Literatures including, textbooks, journals, proceedings, periodicals and databases written in English, Arabic, Hausa and Nupe on Medicinal Plants used to treat human diseases in Arabian Peninsula and other parts of the world were consulted for relevant information. Dictionaries of English/ Arabic and Arabic/ English were also consulted for accuracy. The plants and plant names (Scientific, English, Arabic and Persian), plant parts, associated

diseases and phytochemical principles of the plants were recorded. Decoctions, infusions, and concoctions are prepared from leaves, unripe fruits, seeds and stems of the listed plants. The preparations are used according to Arab cultures (Ashur, 1986; Baydoun, 2003; Blech, 2006; Carr et al., 1978; Cowan, 1960; Davis, 1988; Adjonohoun et al., 1989; Brown, 2004; Al-Eisawi, 2004; Patzelt, 2004; Duke et al., 2002; Gbile, 1986; Kapoor, 2001; Barneth, 2006; Robertson, 2008; IUCN, 2007; Tuxhill, 1999; Mann et al., 2003; Roper, 1998; Saganuwan, 2009; Steentoft 1988; Tindall, 1986; World Programme for the Census of Agriculture 2010; Wehmeir et al., 2005; Yineger et al., 2008; Nwosu, 1997; Adeniji, 2003; Akpata, 1979; Dreisbach, 1983; Eghianruwa, 2002; Gefu et al., 2000; Gibbon and Pain, 1988; Iwu, 1993; Keay et al., 1964; Okogun, 1986).

## RESULTS

A list of about 150 Medicinal plants with various medicinal uses was evolved from various literatures translated from Arabic into English, and vice versa, Arabic to Hausa and English to Hausa. The plants are obtainable in the Arab nations such as Saudi Arabia, Yemen, Iran, Jordan, Oman, Palestine etc and Israel from the Middle East, Egypt, Morocco, Libya, Algeria, Somalia, Eritrea, Ethiopia, Tunisia and Sudan from North Africa. A few of the listed plants are also obtainable in Nigeria and other parts of the world and identified with different ethnic names. All the plants listed in this report as having biological activities grow in Arabian Peninsula and some other tropical and subtropical regions of the world.

Some of the listed plants have been used since the beginning of mankind, while others are currently being used in several nations of the Peninsula to maintain health and medical care (Ashur, 1986; Duke et al., 2002; Kapor, 2001; Robertson, 2008). For example *Cinnamomum zeylanicum*, *Cocos nucifera*, *Borago officinalis*, *Choriandrum sativum* and *pistachia lentiscus* are used for the treatment of psychosis. But *Citrus sinensis*, and *Inabudubb* and *Cicer aurietium* are used for the treatment of cancers. Several of the listed plants are useful in the treatment of asthma, hypertension, diabetes, tuberculosis, liver and kidney problems. While others like pistachio, *Phaseolus vulgaris*, *Olea europaea*, *Orchis spp*, *lycopersicum esculentum*, *Helianthus annuus*, *Glacyrrhiza glabra*, *Arvena sativa*, *Cicer aurietium*, *Brassica juncea*, *Allium porum*, *Prumis americana* and *Allium cepa* contain protein and sulphur that may be used to boost immunity in HIV/AIDs patients.

## DISCUSSION

Our findings support the report of WHO (1998) indicating that medicinal plants are used throughout the developed and developing countries as home remedies, over the counter drug products and raw materials for pharmaceutical industries. These plants, which represent a substantial global drug markets contain phytochemicals, which are bioactive compounds used to maintain health and treat diseases in many parts of the world (Remilard

and Wynn, 2005). Our reports support also, the work of Longer and Robinson (1985), indicating that since the beginning of humanity, the struggle against diseases has been part of every day life and that plant materials have played a primary role in the treatment of sickness. The observation that over 100 medicinal plants are reported to have therapeutic value suggests a vast number of biologically active compounds within the plant kingdom of ecosystem in Arabian Peninsula and these plants can be used in herbal medicine. But the geographical distribution of the plants starts from Yemen to Iran passing through Jordan to Israel and crossing the Mediterranean Sea to Egypt, Mauritania, Algeria, Libya, Morocco, Tunisia and Sudan in the North African region. However, the distribution extends to Saudi Arabia crossing the Red Sea to Somalia, Ethiopia, Eritrea and Kenya in Africa.

The Bilad As-Sham which comprises Jordan, Palestine, Syria and Lebanon has about 4,500 species belonging to six biogeographical regions, Lebanon, with 2,800 - 4,500 species is the richest area. The plants of the area represent the dry ecosystem of the region of which many species are international genetic resources especially the cereals, legumes and fruit trees, almost 25% of the species are medicinal plants (Al-Eisawi, 2004). But the total flora of Oman comprises about 1100 species approximately 15% of the species are endemic or regionally endemic with three largest families *Compositae*, *Euphorbiaceae* and *Asclepiadaceae*. Southern Oman is a regional centre of endemism with about 150 species in the fog desert (Patzelt, 2004). United Arab Emirate (UAE) has 600 species in 70,000 square kilometers of the UAE, *prosopis cinerea* extended to the country from the neighbouring regions. But *Haloxyton persicum* occurs in coastal saline areas, the easternmost limit of distribution of this species in Arabian Peninsula. Some species are found in Wadis and Jebels. Although *Prosopis juliflora* and *Calotropis procera* are under threat from development (Brown, 2004). Since part of the objectives of this compilation is to conserve plants biodiversity, there is need for all the ethnic and religious groups of the world to know the plant biodiversity of one another, because 15,000 plant species may face extinction due to over harvesting and habitat loss (IUCN, 2007), translating to the Earth losing at least one potential major drug every two years (Robertson, 2008). Each species of plant lost to extinction represents not only the potential loss of life-saving cures for diseases such as cancer or acquired immunodeficiency syndrome (AIDs), but also the loss of possible protein-or vitamin-rich foods or more productive and stable crops (Robertson, 2008).

Medicinal species are very profitable. A 1995 analysis estimated that each year new plant derived drug is worth an average of \$94 million to drug companies and \$449 million to society (Mendelsohn and Bialick, 1995). Sales of \$24.4 billion from non-prescription and over-the-counter plant-based drugs was made world wide in 1985 (Pearcea and Noran, 1994; Tuxhill, 1999). Examples of plant - derived medicines found from medicinal plants of

Arabian Peninsula include aloe obtained from *Aloe species* used for the treatment of burns and wounds (Marinelli; 2005), aspirin obtained from Willow (*Salix species*) used for pain relief, promotion of heart - health and blood thinning (Tuxhill, 1999), codeine obtained from opium poppy (*Papaver somniferum*) for the treatment of pain relief and cough suppression (Online medicine, 2007), colchicines obtained from Autumn crocus (*Colchicum autumnale*) for the treatment of gout and cancer (Tuxhill, 1999) and taxol from *Taxus species* for the treatment of breast and other cancers (Robertson, 2008) (Table 1). Our report of some medicinal plants of Arabian Peninsula agrees with the report of Simpson and Ogorzaly (1995), Green (2003) and Gill (1994) indicating that use of plants predates the orthodox health problems and that excavations of cave dwellings occupied over 300,000 years ago revealed that peaking man, the extinct species closest in resemblance to modern man (*Homo sapien*) gathered wall nuts, hazelnuts, pine nuts and rosehips. These findings did not indicate that man discovered that he could eat plants as food but rather people's ability to manipulate plants became increasingly sophisticated with time and exposure.

Recent archaeological findings revealed that at least 3000 plant taxa has been used as food by man and 200 out of these have successfully been domesticated. Many of the plants reported in this compilation contain primary, secondary and tertiary metabolites which denote that the plants can be used as food, resources for pharmaceutical industries and biotechnology. Hence our report agrees with the report of Heiser (1990), Green (1995), Gill (1994) and Lewington (1990) indicating that plants are used to produce gums, clothes, resins, tannins, carbohydrate derivatives, sugar, protein, alkaloids, glycosides, flavonoids, anthraquinones, deoxyribonucleic and ribonucleic acids which are used in food and drug production and genetic engineering. The distribution of some medicinal plants of Arabian Peninsula to Africa and other parts of the world may be connected with 800 years of Islamic society and culture in Spain between the 8<sup>th</sup> and 15<sup>th</sup> centuries. The contribution of Muslim Spain to the preservation of classical learning during the Dark Ages and the first flowerings of the Renaissance has long been recognized. The medieval Islamic world, from Central Asia to the shores of Atlantic was a world where scholars and men of learning flourished (Femi, 2010).

During the period, Jews and Christians interacted with Muslim Arabs and they used material medica of one another. Also Arab-Barbas, Tuaregs, Hausas, Fulanis and Shuwa-Arabs of Africa interacted with Persians, Jews and Arabs from the Middle East during the same period. Many of the traits on which modern Europe prides itself came from Muslim Spain. Diplomacy, free trade, open borders, the techniques of academic research, anthropology, etiquette, fashion, alternative medicine hospitals all came from Spain which was one time a city of Islamic world (Femi, 2010). In many eastern cultures such as those of India, China and the Arab/Persian world,

traditional medicine was systematically recorded and incorporated into regular system of medicine that refined, developed and became a part of the material medica of these countries. The ancient civilization of India, China, Greece, Arab and other countries of the world developed their systems of medicine independent of each other but all of them were predominantly plant based. Indian was known as a place of rich natural resources, knowledge, wisdom and scholarship. People from other countries of the world as China, Cambodia, Indonesia and Baghdad in Iraq used to come to the ancient universities of India like Takshila (700 BC) and Nalanda (500 BC) to learn health sciences of India particularly 'Ayurveda'. It is perhaps the oldest (6000 BC) among the organized traditional medicine. It spread with Vedic, Hindu and Buddhist cultures and reached as far as Indonesia in the east and to the west it influenced the ancient Greek who developed a similar form of medicine (Tewari, 2000). But the very first university established after Christ, the university of Cordoba in Spain established in the 9<sup>th</sup> century and other three, Qarawiyyin University in Fez, Morocco; Al-Azhar University in Cairo, Egypt and Zaytuniyyah University in Tunis, Tunisia all of which were established in the 10<sup>th</sup> century and became the institutions the west first came in contact with the idea of tertiary education (Femi, 2010). The distribution of the medicinal plants may suggest possible transportation of the plants from Arabian Peninsula to North Africa during the trans-Sahara trade between the merchant Arabs of Middle East and Tuaregs and Arab-Barbas of the North Africa and Hausas, Fulanis and Shuwa-Arabs of West African regions. And this may suggest why Ivory Coast is the 3<sup>rd</sup> world producer of Coffee, Brazil being the first, Columbia the second and Indonesia fourth (Lilicarp and Cousins, 2006). The presence in Nigeria of some of the reported plants may also be as a result of interactions between Arabs, Persians and Jews from the Middle East and Arab Barbas, Fulanis, Shuwa-Arabs, Tuaregs and Hausas from Africa during pilgrimage to either Saudi-Arabia or Jerusalem. This shows that positive interactions between different ethnic and religious groups could yield beneficial consequences. Our reports further support the work of Kapoor (2001) revealing that during the intimate contact between even the old Hindu and the Arabian medicine, which lasted for a century, there was a great deal of intermingling, and each utilized the material medica of the other. Our compilation of over 100 medicinal plants from Arabian Penninsular agrees with the report of Ogundipe and Ajayi (2008) indicating that in all countries of the world, earliest type of medicine in most cultures was the use of plants (herbalism).

Hence, to protect plant germplasm and ensure availability, the public should be educated to the importance of the plants and all possible avenues should be used to encourage the public to become acquainted with their medicinal uses and to cultivate the plants on the farms and in gardens and flower pots for therapeutic uses (Saganuwan, 2009). Also the incorporation and

Table 1. Medicinal plants of Arabian Peninsula.

S/No.	Family, scientific and english names	Vernacular name(s)	Plant part(s) used	Medicinal uses	Principles
1.	<i>Lauraceae</i> <i>Cinnamomum zeylanicum</i> Cinnamic (E)	Sinamik (A)	Bark: the three types of cinnamic are: true, wood and clove cinnamic	Uterine and ovarian diseases, antipyretic, diuretic, laxative, blurred vision pimples, eczema, cough, catarrh, pains, strangury, stimulant, asthma, psychosis, liver and heart diseases	Cinnamic
2.	<i>Salvadoraceae</i> <i>Salvadora persica</i> Tooth brush tree (E)	Siwak (A) Arak (A) Darkhat-e-misbak (P)	Root, fresh root is better	Teeth cleansing, good vision, clear voice, stimulant, deodorant, antihelmintic, blood tonic, carminative diuretic, deobstruent	Sinnigrin, tannic acid, myrosin, sodium chloride, potassium chloride, oxalates
3.	<i>Solanaceae Atropa bella donna</i> Deadly night shade (E)	Sittulhiss (A)	Leaves, roots	Miosis, local anaesthetic, gastric ulcer, anticolic (the plant is used in manufacturing of medicated eye glasses)	Atropine, belladonine, hyoscyamine, asparagine
4.	<i>Cephaelis ipecacuanha</i> Ipecacuanha (E)	Iqussuss (A)	Roots	Wound, gastritis, tonic, adison disease, diarrhoea, cough	Salts of potassium, calcium, magnesium, phosphate and sex hormones
5.	<i>Cruciferae Raphanus Sativus</i> Wild radish (E)	Fajal (A)	Juice, seeds (it is not good for diseased liver)	Diuretic, whooping cough, stomach and heart tonic, carminative aphrodisiac, herpetic eruptions, aesthetic, deafness, gout, pains of joint and sciatic nerve, vomiting, cough	Vitamins A and C, salts of calcium, iron, iodine, sulphur, manganese
6.	<i>Arbutus unedo</i> Wild radish (E)	Firawala (A)	Leaves	Aids digestion, laxative, blood tonic, antipoison, aesthetic, cholagogue, allergy, joint, gall bladder, kidney and liver diseases, inflammations, diarrhoea (Leaves or roots decoction is taken)	Calcium, iron, sugars, vitamins B, C, E and K
7.	Pistachio (E)	Fustaq (A)	Oil, seed (Oil is highly nutritious and costly)	Nerve and blood tonic	Oil, vitamin B, protein, phosphorus, copper, iron, calcium
8.	<i>Labiatae</i> <i>Mentha pulgiam</i> Penny Royal (E)	Filiyya (A)	Sap, whole plant	Central nervous stimulant, ammenorrhoea, dysmenorrhoea, colic, heart diseases	-

Table 1. Cont'd.

9.	<i>Papilionaceae</i> <i>Phaseolus vulgaris</i> Common european bean (E)	Fasuliyya (A)	Roots, leaves, seeds	Heart failure, hypertension, maldigestion, diuretic, sedative, kidney and liver diseases, retarded growth, fatigue, burns, inflammations, tetter	Vitamins A, B, and C, calcium, phosphorus, proteins, inositol, enzymes
10.	<i>Papilionaceae</i> <i>Vigna unguiculata</i> Common bean (E)	Ful (A)	Flower	Diuresis, digestive stimulant, vomiting, pain, inflammations of kidney, gall and urinary bladders, decoction of 50-60 flowers in 2 cups is taken	Protein
11	-	Fulssuya (A)	Oil, fruits	Digestive, body and bone builder, cholesterolaemia, diabetes	Oil, phosphorus
12.	<i>Compositae</i>	Qirtim (A)	Flowers	Jaundice, aesthesia, rheumatism, oedema, paralysis of extremities, amenorrhoea, dysmenorrhoea, postnatal problem, cough, asthma	Oil
13.	<i>Brassicaceae</i>	Qaranbit	Whole plant	Renal calculi, asthma	Phosphorus
14.	<i>Myrtaceae</i> <i>Eugenia caryophyllata</i>	Qaranfal (A) Mismar (A)	Oil, seeds	Liver tonic, aids digestion, strong CNS stimulant, blurred vision, renal incontinence, infertility, antipyretic, disinfectant, antipoison, toothache, diarrhoea, vomiting	Oil
15.	<i>Urticaceae</i> <i>Fleurya ovalifolia</i> Stinging nettle (E)	Qiraas (A)	Roots, leaves	Hypertension, arteriosclerosis, blood tonic, promotes hair growth, haemorrhage, pile, renal colic (root decoction is taken orally)	-
16.	<i>Onagraceae</i> <i>Trapa bispinosa</i> Syn: <i>Custanea sativa</i> Chestnut (E)	Qustul (A)	Barks, leaves	Inflammations, cerebral stimulant, aesthesia, anaemia, ulcers, haemorrhoids, colic, diabetes whooping cough	Azotia compound, iron, calcium, phosphorus, manganese, sulphur, tannic acid
17.	<i>Vitaceae</i> <i>Heliotropium indicum</i> Syn: <i>Cissus quadrangularis</i> <i>Vitis quadrangularis</i> Bone setter (E)	Qasiyn (A)	Leaves, flowers roots	Stimulant, digestive, foot cracking, vomiting, diarrhoea, anuria, tuberculosis, rheumatism and joint diseases (leaf or flower decoction taken)	Volatile oil, inulin, helenin

Table 1. Cont'd.

18.	<i>Araceae Colocasia antiquorum</i> Elephant's ear (E)	Qalqas (A)	Stems, roots	CNS stimulant, cough, voice clearing, tumours.	Salts of phosphorus, calcium, little protein, sugar and starch
19.	<i>Graminae/Poaceae Triticum sativum</i> Wheat (E)	Qamh (A)	Seeds chaff	Whitlow, cough, fevers, constipations, diarrhoea, rheumatism, maldigestion, colic, prophylactic	Salts of potassium, sodium, phosphorus, iron, magnesium, calcium, silicon, sulphur, sugar, cellulose, vitamins A and B
20.	<i>Erythrea Centaurium Centaury</i> (E)	Qantariyun (A)	Flowers, stems	Wounds, ulcers, haemostatic, splenic and hepatic diseases, amenorrhoea, ecboic, vermifuge, alopecia, malaria, (menstruating and pregnant women should avoid it)	-
21.	<i>Coffea arabica</i> Coffee (E)	Qahawa (A)	Fruits	Diarrhoea, stimulant, fevers, digestive, (chronic consumption causes insomnia). It is cardiotoxic	Caffeine, caranella, oleic and palmitic acids, tannin
22.	<i>Linaceae Linum usitatissimum</i> Flax (E)	Kitan (A)	Bark	Inflamations, ulcers, aesthesia, burns, pain, renal colic, diarrhoea, (Decoction is taken orally; oil is rubbed topically)	Alum, oil
23.	<i>Zingiberaceae Zingiber officinale</i> Ginger (E)	Zanjebil (A)	Rhizomes	Hepatoprotective, clears vision, digestive, aphrodisiac, gout, rheumatism, voice clearance, sudorific, antipyretic, antiscurbitic, food condiment	Gum, resin, volatile oil, resin oil, gingerin, calcium, vitamins A and B
24.	<i>Palmae Olea europoea</i> Olive tree (E)	Zytun (A)	Oil, leaves, barks	Aesthetic, liver diseases, thrush, dental caries, oesophageal swelling, ulcers, oedemas, wound, demulcent, emollient, cholagogue, calculi, diabetes (2 spoonful of oil is taken twice daily)	Protein, oil, salts of phosphorus, iron
25.	<i>Rhamnaceae Zizyphus spp</i>	Zyzafun (A)	Leaves, flowers, oils	Antispasmodic, emollient, coughs, sudorific, antipoison, laxative, skin eruptions (powder or decoction is used topically and orally).	Volatile oil, saponin, hormones, Zizyphic acid

Table 1. Cont'd.

26.	<i>Amaranthaceae</i> <i>Amaranthus hybridus</i> Spinach (E)	Sabanih (A) Isfanakh (A)	Whole plant	Jaundice, inflammation, blood tonic, laxative, digestive	Phosphorus, potassium, sulphur, manganese, calcium, vitamins A and B, acids, azotia agent, iron
27.	<i>Orhchis spp</i> Salep (E)	Sahlab (A)	Leaves, roots	Demulcent, astringent, diarrhoea, colic, poisoning haemorrhoids, haematuria, genitourinary tract inflammations, ulcer	Gum, starch, protein, volatile oil, mineral salts
28.	-	Sirru Khiss (A)	Roots, leaves, stems	Fresh wounds, vermifuge, carminative, lumbago, rheumatism, pains, migraine, dental caries, fatigue (embryocidal)	Flouro chlorticine
29.	<i>Rutaceae</i> <i>Ruta graveolens</i> Common rue (E)	Sazaab (A)	Leaves, oil	Facial paralysis, colic, hiccup, jaundice, splenitis, vermifuge, strangury, urinary diseases, piles, cancer, headache, lumbago, arthritis, gout, anaemia, ankylosis, inflammations	Oil
30.	<i>Labiatae Thymus serpyllum</i> Wild thyme (E)	Saatar (A)	Whole plant	Digestive, fatigue, helminthiasis, carminative, stimulant, sudorific, emmenagogue, antispasmodic, mucolytic, jaundice, antidote for poisoning from snake venom and other poisons, expel rodents	Thymol
31.	<i>Rosaceae Cydonia oblongata</i> Quince, Cydonia (E)	Safarjal (A)	Whole plant	Phthisis, hepatitis, antiemetic, blenorrhagia, skin cracking. haemorrhoid, diarrhoea, cancer, whooping cough, digestive, enteritis	Vitamins A and E, sulphur, phosphorus, calcium, sodium, potassium
32.	<i>Curcubitaceae</i> <i>Luffa acutangula</i> Silk guard (E)	Silq (A)	Juice, whole plant	Facial paralysis, headache, migraine, eryspelax, cholagogue, splenitis, herpetic eruptions, leprosy, warts, alopecia, gout, oedema, aesthesia, emollient, diuretic	Vitamins A and C, iron calcium
33.	<i>Anacardiaceae</i> <i>Rhus radicans</i> Sumac, Rhus (E)	Summaq (A)	Seed, leaves	Suppresses bile, antinausea, haemorrhage, scabies, small pox, oedema, bee sting, uterine and ear discharges	Large amount of tannin
34.	<i>Pedaliaceae</i> <i>Sesamun indicum</i> Sesame (E)	Simsim (A)		Infertility, cholagogue, voice clearing, nephritis, snake bite, aesthetic, emmenagogue, ecbolec. arteriosclerosis, diuretic	Sesame oil

Table 1. Cont'd.

35.	<i>Solanaceae</i> <i>Lycopersicum</i> <i>esculentum</i> Tomato (E)	Tamatim (A)	Fruits	Scurvy, rheumatism, renal and urinary calculi, arthritis, diuretic, foot cracking, aesthetic	Vitamins A, B, C and D, protein, mineral salts, $\beta$ carotene, carbohydrate, lycopene, cellulose, tannin
36.	<i>Compositae</i> <i>Helianthus annuus</i> Sunflower (E)	Ibadusshams (A)	Seeds, roots	Consolation, malaria, diuretic, mucolytic, arteriosclerosis, hypercholesterolaemia, gingivitis, night blindness	Proteins, minerals, vitamins, glycerins, phosphorus, oil
37.	<i>Lens culinaris</i> Lentil (E)	Adas (A)	Whole plant	Annuria, anaemia, dental caries, cough, chest pain, digestive, wound, kidney disease, lumbago, thirst (it causes cancer)	Hydro-carbons, oil
38.	<i>Cupressaceae</i> <i>Juniperus oxycedrus</i> Juniper (E)	Arar (A)	Flowers	Chronic cough, chest pains, digestive, stomachic, colic, haemorrhoids, diabetes, antipoison, expels rodents, anti-sweating, diuretic, urinary purifier, rheumatism, skin diseases	-
39.	-	Irqulhalawa (A) Alhashiyshatus sabuniyya (A)	Root, leaves	Diuretic, laxative, sudorific, stimulant, rheumatic diseases, arthritis	Saponin, protein, chlorophyll, gum resin
40.	<i>Fabaceae</i> <i>Glacyrhiza glabra</i>	Irzulmusahal (A)	Roots, gum, leaves	Diuretic, sudorific, appetizer, stomachic, skin and disease, renal disease	Protein, sulphur, calcium oxalates, resin
41.	<i>Rutaceae</i> <i>Citrus sinensis</i> Grape (E)	Inab (A)	Fruits, leaves, stem, bark, roots	Cough, inflammations, thirst, polycythemia, hepatic and adrenal problems, gastritis, sedative, diuretic, laxative, cancer, bladder and renal pains	-
42.	-	Inabudubb (A)	Leaves	Diuretic, urinary tract purifier, nephritis, prostate cancer, renal colic, renal incontinence, ex-vaginale, gastroenteritis, diarrhoea	Phenol glycoside
43.	<i>Rhamnaceae</i> <i>Zizyphus vulgaris</i> Jujube (E)	Anbar (A)	Oil, seeds, leaves	Tonic, digestive, perfume, stimulant, sudorific, cough, mucolytic	Gum, sterol, cinnamic, volatile oils, resin



Table 1. Cont'd.

44	<i>Rhamnaceae</i> <i>Zizyphus jujube</i> Syn: <i>Zizyphus maritim</i> J jujube (E)	Unab (A)	Fruits, leaves	Asthma, diuretic, constipation, cough, inflammation, thirst, polycythemia, liver, kidney and urinary bladder diseases, anasarca, diseases of lower parts of body, itching, eryspelax, gangrene, throat diseases	-
45.	-	Aquul (A) shaukul-jamal (A)	Stem, leaves	Haemorrhoids, renal incontinence, laxative, digestive, arthritis	-
46.	<i>Liliaceae/ Alliaceae</i> <i>Colchicum autumnale</i>	Alkarkam (A) Arraihaqan (A) Aljadiy (A)	Leaves	Euphoric, digestive, clear vision, choleric, ecobolic, Stimulant, enmenogogue, gout	Cholchicine
47.	<i>Graminae/ Poaceae</i> <i>Dactylis glomerata</i> Dactylis (E)	Najiyl (A)	Roots	Diuretic, blood tonic, diabetes, diaphoretic, fever, skin rashes, rheumatism, gout, cystitis (15 g of root is decocted for 10 min) and taken in 4 cups	Alum, saponins
48.	<i>Labiatae Mentha</i> <i>piperita</i> Peppermint (E)	Naanaa (A)	Mint emulsion	Nausea, gastric pain, choking, vermifuge toothache, heart tonic, inflammations, cholagogue, anti stimulant, cough, asthma, diuretic, rheumatism, aphrodisiac	Menthon, menthol (insect expeller)
49.	<i>Rutaceae</i> <i>Citrus aurantifolia</i> Bitter lemon (E)	Naranj (A)	Peels, leaves, flowers	Fevers, cold, malaria, eczema, aesthesia, anthelmintic, ecobolic, colic, carminative, antispasmodic	Neroli oil
50.	<i>Compositae</i> <i>Cichorium endivia</i> Chicory, Endive (E)	Handaba (A)	Roots	Diuretic, cholagogue, digestive, scorpion sting, spleno-renal problems, jaundice, snake bite, wasp sting, anti-microbial, annuria, ophthalmia, haemorrhoid	Inulin
51.	-	Haluk (A)	Whole plant	Mucolytic, methaemoglobinemia, diuretic, calculi, antiobesity, hypertension	-
52.	<i>Curcubitaceae</i> <i>Curcubita maxima</i> Pumpkin (E)	Yaqtin (A)	Seeds	Digestive, diuretic, soothner, constipation, enteritis, diabetes, insomnia, skin eruption, impotence, cystitis, urethritis	Vitamins A and B, and amino acids, leucine, tyrosine, piperazine

Table 1. Cont'd.

53.	<i>Apiaceae</i> <i>Anethum graveolens</i> Dill (E)	Shibt (A)	Seeds	Lactagogue, mucolytic, hemiplegia, facial paralysis, hiccup, cancer, emmenagogue, spleen and liver problems, cholagogue, Jaundice, vomiting, piles, carminative	Sapsin, volatile oil
54.	Marry tree (E)	Shajratu Maryam (A) Shawkatu Maryam (A)	Leaves, roots	Anti pyretic, sudorific, thirst, jaundice, rheumatic pains, haemorrhoids	-
55.	<i>Gramnae/ poaceae</i> <i>Sorghum bicolor</i> Guinea corn (E)	Shair (A)	Seeds, flowers, leaves	Cough, diarrhoea, diuretic, purgative, laxative, antipyretic, euphoric, emollient hepatoprotective, hypertension, diarrhoea, tuberculosis, general debility, nephritis, cystitis	Protein, starch, minerals, phosphorus, calcium, iron, potassium, hordenin, malarin
56.	<i>Apiaceae Foeniculum</i> <i>vulgare</i> Sweet fennel (E)	Shimr (A)	Whole plant	Cholagogue, short sightedness, anaemia, lactagogue, diuretic, emmenagogue, calculi, nephritis, cystitis, analgesic, vermifuge, aphrodisiac, appetizer, hypnotic, colic	Vitamins A, B, and C, calcium, phosphorus, potassium
57.	<i>Curcubitaceae</i> <i>Cucumis melo</i> Musk Melon, Cantaloupe (E)	Shamam (A)	Fruits, leaves	Dropsy, jaundice, cholagogue, laxative, emollient, purifier, renal calculi, antiputrefactive, astringent, demulcent, antipyretic, anaemia, diarrhoea, haemorrhoid, oliguria, aesthetic	Sugar, vitamin C, iron, copper, potassium, sulphur, phosphorus
58.	<i>Urticaceae Camellia</i> <i>sinensis</i> Tea bush (E)	Shay (A)	Seeds, Leaves	Stimulant, diuretic, congestive heart failure(100 seeds cause serious toxicity; heart beat disturbances, jaundice, anorexia)	Tannin, caffeine, theobromine, theophylline, gelutinic acid, volatile oil
59.	<i>Urticaceae</i> <i>Arvena sativa</i> Oat (E)	Shawfan (A)	Bark, seed	Chronic cough, gout, pimples, vaginal discharge, emollient, diuretic, insomnia, whooping cough, renal colic, inflammations of knee, gall bladder, renal calculi, haemorrhoids, rheumatism	Protein, oil, salts of calcium, iron, phosphorus, potassium and sodium
60.	<i>Compositae</i> <i>Artemisia maritima</i> Syn: <i>Artemisia brevifolia</i> Worm seed (E)	Shaih (A)	Flower, leaves	Mucolytic, vermifuge, cholagogue, hiccup, colic, lumbago, pains, alopecia, ringworm, ophthalmia, antipyretic, expels rodent and snakes, glycosuria, malaria	Santonin, artemisinin

Table 1. Cont'd.

61.	<i>Leguminosae</i> <i>Cicer aurietium</i> Chick pea (E)	Himas (A)	Oil, seeds	Abortion, aesthetic, ulcer, cancers, scabies, lumbago, pimples, toothache, oedemas, renal calculi, aphrodisiac, diuretic	Protein, sulphur, phosphorus, potassium, calcium starch (61%), oil (1%)
62.	<i>Lythraceae</i> <i>Lawsonia innermis</i> Henna plant (E)	Hinaa (A)	Leaves	Aesthetic, dye, headache, histological stain, acanthosis, suppurative mange, anti-fungal, antibiotic, seborrhea, baldness, sudorific, aromatic	Tannin, gum, zinc, mercury, lead, arsenic
63.	<i>Curcubitaceae</i> <i>Citrullus colocynthis</i> Colocynth (E)	Hanzwal (A)	Oil, fruits	Nose bleeding, pains of ligament, joint and sciatic nerve, gout, skin diseases, rheumatism, cold, gastro-intestinal problem, secretagogue, scorpion sting	It contains toxic principle that is fatal
64.	<i>Malvaceae</i> <i>Marsh sylvestris</i> High mallow (E)	Khubaza (A)	Leaves	Diuretic, digestive, coarseness of voice, suppresses cough, nephritis, pneumonitis, stomatitis, diarrhoea, oesophagitis, uteritis, cystitis	-
65.	<i>Cynara scolymus</i> Artichoke (E)	Kharshuf (A)	Leaves, stem, Stem bark, root	Deodorant, laxative, expectorant, aphrodisiac, pediculosis, diarrhoea, appetizer, diuretic, antipyretic, hepatitis, hypertension, annuria, arteriosclerosis	Vitamins A and B, salts of phosphorus, manganese, inulin, sinarin
66.	<i>Brassicaceae</i> <i>Brassica nigra</i> Black mustard (E)	Khardal sauda'a (A)	Seeds, leaves	Hypotension, jaundice, dyspnoea, numbness, headache, dizziness, asthma, emmenagogue, migraine, stomatitis, acanthosis	Sinigrin, Sulphur
67.	<i>Brassicaceae</i> <i>Brassica juncea</i> White mustard (E)	Khardal baida'u (A)	Seeds, leaves	Hypotension, jaundice, dyspnoea, numbness, headache, dizziness, asthma, emmenagogue, migraine, stomatitis, acanthosis	Silibinin, Sulphur
68.	<i>Euphorbiaceae</i> <i>Ricinus communis</i> Castor oil tree (E)	Kharu (A)	Oil, leaves	Emmenagogue, ecboic, cancer, carminative, warts, contraceptive, umbilicis, aesthetic, catarrhs, dystonias, haemorrhoids, callus, bloat, constipation, HIV/AIDS	Ricin, oil, ricinoleic acid
69.	<i>Ceratonia siliqua</i>	Kharun (A)	Seeds, molasses	Antidiarrhoeic, diuretic, dysentery, soothner, antacid	Sugar (5%), gum, molasses

Table 1. Cont'd.

70.	<i>Compositae</i> <i>Lactuca sativa</i> Lecttuce (E)	Khissu (A)	Leaves	Infertility, antispasmodic, night blindness, beriberi, paralysis, emollient, analgesic, sedative, cough, diabetes, insomnia, pimples, boils	Vitamins A, B and E, setrin, calcium, iron phosphorus, oil
71.	<i>Lignum vitae</i> Guaicom wood (E)	Khashabul-anbiyau (A)	Barks, roots, leaves	Syphilis, gout, rheumatism, local anaesthetic, constipation, sudorific, dental caries	Resin, oil, gum, fibres, acidic salts
72.	<i>Malvaceae</i> <i>Althea officinalis</i> Marsh mallow (E)	Khutma wardiy (A)	Roots, flowers, leaves	Analgesic, anti inflammatory, cough, catarrhs, urine sensation, stomatitis, ophthalmia, wound	Tannin, alum
73.	-	Khulla'a (A) khushaizak (P)	Seeds	Vermifuge, renal and hepatic pains, diuretic, herpetic eruptions	Phyzamine
74.	<i>Curcubitaceae</i> <i>Curcumis sativus</i> Cucumber (E)	Khayyar (A)	Leaves	Hepatitis, gastritis, splenitis, pneumonia, diuretic, calculi jaundice, poisoning, fever, colic, glycosuria, scabies psoriasis, eczema, freckles	Vitamins A and B, calcium, phosphorus, magnesium
75.	<i>Portulacaceae</i> <i>Portulaca oleracea</i> Common purslane (E)	Rujlatu (A)	Seeds	Headache, urinary bladder pain, vermifuge, ulcers, haemostatic, suppresses bile, ophthalmia, fevers, haemorrhoids, diarrhoeas	-
76.	<i>Punicaceae</i> <i>Punica granatum</i> Pomegranate (E)	Ruman (A)	Barks, roots	Cough, emollient, diuretic, diarrhoea, suppresses bile, vomiting, chest pain, jaundice, anthelmintic (tapeworm), laxative	Tannin, oil
77.	<i>Labiatae</i> <i>Ocimum basilicum</i> Sweet basil (E)	Raihan (A)	Flowers, leaves	Headache, sedative, colic, diarrhoea, piles, dizziness, digestive, antispasmodic, migraine, paralysis, numbness, insomnia, dysmenorrhoea, cough, nervous temperament	Estralgol (it is mutagenic and carcinogenic)
78.	<i>Lauraceae</i> <i>Persea americana</i> <i>Avocado</i> (E)	Zabadiyya (A)	Fruits	Digestive, antipathogenic, stimulant, growth promoter	Water (60%), oil (20%), protein (2.6%), others (7.3%), Vitamin A

Table 1. Cont'd.

77.	<i>Labiatae</i> <i>Ocimum basilicum</i> Sweet basil (E)	Raihan (A)	Flowers, leaves	Headache, sedative, colic, diarrhoea, piles, dizziness, digestive, antispasmodic, migraine, paralysis, numbness, insomnia, dysmenorrhoea, cough, nervous temperament	Estralgol (it is mutagenic and carcinogenic)
78.	<i>Lauraceae</i> <i>Persea americana</i> Avocado (E)	Zabadiyya (A)	Fruits	Digestive, antipathogenic, stimulant, growth promoter	Water (60%), oil (20%), protein (2.6%), others (7.3%), Vitamin A
79.	<i>Ampelocissus grantii</i> Syn; <i>Vicis vinifera</i> Dried grape (E)	Zabib (A)	Fruits, leaves	Mucolytic, fatigue, attention deficit disorder, jaundice, ringworm, gastro-intestinal ulcers, cough, expectorant, relaxant	-
80.	<i>Crataegus azarole</i> Azarole (E)	Zarur (A)	Fruits, flower	Suppresses bile, sedative, heart nourishment, arterial stimulation, diarrhoea, laryngitis	-
81.	<i>Salicaceae</i> <i>Salix aegyptiaca</i> Mediterranean Willow (E)	Safsaf (A)	Leaves, barks	Choleretic, heart palpitation, thirst, burn, scabies, mange, oedema, rheumatic fever, diuretic, hydrotic, antipyretic, Antinflammatory, gingivitis	Acetyl salicyclic acid (aspirin), tannin, safsafin
82.	<i>Santalaceae</i> <i>Santalum album</i> Sandal wood (E)	Sandal (A)	Oil, leaves	Diaphoretic, stimulant, fevers, thirst, deodorant, colic, carminative, astringent, heart palpitation, gastric and cardiac problems, gout, cold, perfumery	Santalol, fibres, oil
83.	<i>Pinaceae</i> <i>Pinus pine</i> Syn; <i>Pinus palustris</i> Stone pine (E)	Sanubur (A)	Leaves, roots, stem	Ulcers, boils, wound, mucolytic, toothache, diuretic, haemorrhage, lassitude, spermogenic, annuria, cystitis, calculi, haemorrhoids, tuberculosis	Resins, californian and turpentine oils
84.	Tamarisk (E)	Tarfa (A)	Leaves, fruits	Toothache, ulcers, lousiness, small pox, splenitis, chronic diarrhoea, uterine discharge	-
85.	<i>Theobroma cacao</i> Cocoa (E)	Qaqawah (A)	Seeds	Central nervous stimulant, cardiac stimulant, diuretic, dry cough, catarrh, bronchitis, pneumonia, foot cracking, colic, dizziness, eczema	Oil, theobromine, protein, starch, potassium, phosphates, fibres

Table 1. Cont'd.

86.	<i>Borago officinalis</i> Borage (E)	Lisanuthaur (A)	Leaves, flowers	Anti-psychotic, cough, pains, inflammations, sudorific, diuretic, cold, catarrh, blood and heart tonic	-
87.	<i>Musaceae</i> <i>Plantago major</i> Plantain (E)	Lisanulhamal (A)	Fruits and leaves	Tuberculosis, cancer, heamorrhage, stomatitis, splenitis, gingivitis, earache, pneumonia, haemophillia, strangury, epilepsy, elephantiasis, dropsy, heart problem, thrombosis	Alum, cubin
88.	<i>Piperaceae</i> <i>piper cubeba</i> Chinese cubeb (E)	Kababatu ssinniyya (A)	Seeds	Appetizer, digestive, carminative, sialagogue, colic, diarrhoea, gonorrhoea, emollient, diuretic, headache, clears throat, dental caries	Resin, gum, volatile oil
89.	<i>Umbelliferae</i> <i>Apium graveolens</i> Celery (E)	Karfas (A) Alhumadl-ahmar (A)	Flowers	Digestive, antacid, body tonic, laxative, chest ailments, arthritis, jaundice	Oxalates
90.	-	Karkadiyya (A)	Leaves, roots	Arthritis, jaundice, weak sightedness, diuretic, vermifuge, prophylactic, anaemia, diabetes	Vitamins A, B, and E, phosphorus, calcium, sodium, cupper, selenium
91.	<i>Brassicaceae</i> <i>Brassica oleraceae var capitata</i> Cabbage (E)	Karnab (A)	Leaves, roots	Myopia, coarseness of voice, gout, splenitis, jaundice, diuretic, vermifuge emmenagogue, fevers, rheumatism, dejection, impotence, obesity, cough, wound and kidney diseases	Vitamins A, B, and C, iron, iodine, cupper, calcium, potassium, manganese
92.	<i>Liliaceae/ Aliaceae</i> <i>Allium porrum</i> Leek (E)	Kurath (A)	Seeds	Diuretic, antituberculous, infertility, lactagogue, colic, nose bleeding, ecobolic, heamorrhoids, dental caries, cancer, cough, constipation, epilepsy, callus	Vitamins A, B and C, protein, phosphorus, iron, iodine, calcium, potassium, manganese
93.	<i>Umbelliferae</i> <i>Carum carvil</i> Caraway (E)	Karawaya (A)	Seeds, roots	Carminative, diuretic, digestive, catarrh, colic, pains, rheumatism, all diseases	Oil, carum, lemonin, santarin
94.	<i>Umbelliferae</i> <i>Choriandrum sativum</i> Corriander (E)	Kazbara (A)	Whole plant	Oedema, diarrhoea, scabies, itching, hypertension, antipsychotic, antispasmodic, analgesic, arteriosclerosis, antialcoholic, flavoring agents in candies, beverages and tobacco products	Iodine, oil, atenolol, sonobrin,

Table 1. Cont'd.

95.	<i>Umbelliferae</i> Well coriander (E)	Kazbaratulbir (A) Burshawishan (P)	Leaves	Chest illnesses, cold, aesthetic, catarrhs, mucolytic, expectorant, diuretic, cancer, alopecia, stimulant, (concoction is used for alopecia)	-
96.	<i>Curcubitaceae</i> <i>Pyrus communis</i> Pear (E)	Kuthra (A)	Fruits	Hypertension, ashma, eruptions, astringents, arteriosclerosis, diuretic, heart kidney and liver diseases, choleric	Manganese
97.	<i>Apiaceae</i> <i>Cuminum cyminum</i> Cumin (E)	Kamun (A)	Leaves, roots	Diuretic, carminative, colic, antioxidant, uterine discharge, hiccup, appetizer, deafness, spasm, digestive	-
98.	<i>Burseraceae</i> <i>Boswellia dalzielii</i> Frankincense tree (E)	Kandar (A) Libanudakar (A)	Whole plant	Cough, asthma, rheumatism, catarrh	60-70% resin, gum (27-35%), volatile oil, (7.5%), potassium, carbonate, phosphorus, calcium
99.	<i>Brassicaceae</i> <i>Brassica rapa</i> Turnip (E)	Lift (A)	Seeds, oil	Galactogogue, cough, cholagogue, aphrodisiac, calculi, eczema, diuretic, antiobesity, fatigue, catarrh, foot cracking, cold	Oil
100.	<i>Rutaceae</i> <i>Citrus limon</i> Lemon (E)	Laimun (A) Banzahir (P)	Fruits, leaves	Antipoison, antivomiting, appetizer, eczema, herpetic eruption, scurvy, cholera, sunstroke, rheumatism, malaria, fever, vermifuge, fatigue, hepatoprotective	Vitamin C, B <sub>6</sub> , riboflavine, calcium, iron, potassium
101.	<i>Rosaceae</i> <i>Prunus amygdalis</i> Almond (E)	Lauz (A)	Leaves, oil, flowers	Nutraceutical values, diabetes, tuberculosis, antipsychotic, stimulant, insomnia, hypertension, cough, convulsion, skin diseases, burns, earache	Oil
102.	<i>Rosaceae</i> <i>Prunus mahaleb</i> Mahleb (E)	Mahalab (A)	Seeds	Asphyxia, euphoria, expectorant, carminative, hepatic, splenic and renal pains, strangury, eczema, hemiplegia, gout, convulsion, lumbago	-
103.	<i>Labiatae</i> <i>Origanum majorana</i> Marjoram (E)	Mardaqush (A)	Flowers, leaves	Emmenagogue, diuretic, antidecay, antipoison, catarrh, insomnia, dysmenorrhoea, annuria, appetizer, liver, renal and gastric problems, scorpion sting	Thymol

Table 1. Cont'd.

104.	<i>Rosaceae</i> <i>Prunus americana</i> Apricot (E)	Mishmish (A)	Seeds	Piles, fevers, cholagogue, thirst, digestive, blood ailments, appetizer, body tonic, diarrhoea, insomnia, growth promoter, anaemia, cancer	Sugar, protein, oil, iron, vitamins A and C basic acids
105.	<i>Pistachia lentiscus</i> Mastic (E)	Mastic (A)	Gum is produced 3 times in a year; 1 <sup>st</sup> white, 2 <sup>nd</sup> yellow and 3 <sup>rd</sup> black	Antispasmodic, teeth cleansing, rheumatic pain, gout, gastric ulcer, diuresis, diarrhoea in children below 2years, wound	Resin, gum (White, yellow and black types), volatile oil, mastic acid
106.	<i>Musaceae</i> <i>Musa sapientum</i> Banana, Philosophers food, fruit of wise people (E)	Mauz (A) Talh (A)	Leaves, fruits	Cholagogue, heartburn, diuresis, increases sperm, dental caries, anaemia, good vision, self balance, good for pregnant/breast feeding women, children and old), 3 banana yields 1.5% of calcium	Vitamins A, B, C, and E, iron, managanese, sodium, zinc, phosphorus, fluorine, hormones
107.	<i>Rutaceae Citrus medica</i> Citron (E)	Utruj (A)	Leaves, fruits, stems	Antipoison, deodorant, carminative, jaundice, pile, antiemetic, snake bite, scorpion sting	Oil
108.	<i>Medicago sativa</i> Mecca alfa (E)	Izhir (A)	Whole plant	Stimulant, rheumatism, vasodilation, diuretic, gastritis, nephritis, hepatitis, expels rodents, antipoison	Volatile oil
109.	<i>Myrtaceae</i> <i>Myrtus communis</i> Myrtle (E)	Habbulas (A) Aas (A) Alhabbal-as (A)	Flowers, juice, leaves	Antidiarrhoeic, antisudorific, cough, blenorralgia, cystitis, vaginal secretion	Myrtil
110.	<i>Compositae Artemisia absinthium</i> Worm wood (E)	Damsiysa (A) Afsantin (A)	Leaves, root, stem, bark	Vermifuge, diuretic, digestive, ulcer, diarrhoea, ophthalmia, ascariasis, anti poison, aphrodisiac	-
111.	<i>Halvaceae Agaricus campestris</i> Mushroom (E)	Aqrasulmalik (A) Aishul-gurab (A)	Whole plant (Some species are very toxic)	Headache, dizziness	
112.	-	Urqiytun (A)	Roots	Stomatitis, dental caries, chest diseases, diuretic, astringent, anaemia, wound, boils	Tannin, epholine



Table 1. Cont'd.

113.	-	Ummualfi-Waraqah, Hashiyshatun-najrin Hashiyshatun hazanbal (A)	Whole plant	Anaemia, sedative, stimulant, diaphoretic, diuretic, diabetes, dysentery, piles	Volatile oils, cineol, tannin, sugar
114.	<i>Melilotus officinalis</i> Melilot (E)	Ikilulmalik (A) Handaquq (A)	Flowers, roots, stems	Diuretic, scabies lumbago, lactagogue, boils, wounds, oedemas, insomnia, colic	Coumarin
115.	<i>Bromeliaceae</i> <i>Ananas comosus</i> Pineapple (E)	Ananas (A)	Fruits, leaves	Diuretic, digestive, antipoison, anaemia, growth promoter, obesity, arthritis	Bromeline, vitamin A and B
116.	<i>Apiaceae</i> <i>Anisum vulgare</i> Syn; <i>Pimpinella anisum</i> Anise (E)	Yanisun, Alaniyun, Arraziyanjrumiy (A)	Oil, leaves, seeds	Purgative, cough, mucolytic, headache, dejection, earache, ecobolic, lousiness	Volatile and fixed oils, anisol
117.	<i>Solanaceae</i> <i>Solanum melongenalium</i> Aubergine (E)	Bazanjam (P) Ibzanj (A)	Leaves	Haemorrhoids, diuretics, neuralgia (it is embryotoxic and toxic to several body systems)	-
118.	<i>Asteraceae</i> <i>Compositae</i> <i>Anthenis nobilis</i>	Babunaj (A)	Leaves, roots	Antipoison purgative, vasodilator, fever, headache, antiphrodisiac	Fixed and volatile oils, azoline
119.	<i>Rutaceae</i> <i>Citrus aurantium</i> Orange (E)	Burtuqal (A)	Peels, juice, seeds, leaves	Digestive, antiemetic, fever, headache, nervous conditions, diaphoretic, numbness, meningitis, purgative, migraine, scorpion sting, ecobolic, antipoison	Carbohydrates, fructose, glucose, sucrose, calcium, potassium, iron, sodium, citric acid, vitamin E, volatile oil
120.	<i>Lythraceae</i> <i>Lythrum salicarta</i> Purple loosetrile (E) Pea (E)	Basla(A) Albazilaa (A)	Fruits, leaves	It has activity against female sex hormones, fatigue	Protein carbohydrate, vitamins

Table 1. Cont'd.

121.	<i>Liliaceae /Aliaceae</i> <i>Allium cepa</i> Onion (E)	Basl (A)	Bulbs	Diuretic, appetizer, antimicrobial, jaundice, splenitis, emmenagogue, antiaphrodisiac, scabies, cancer, crack, cough, pneumonia, haemorrhoid, scorpion sting	Protein, carbohydrate, iron, phosphorus, calcium, vitamin A, B, C, glucotone
122.	-	Burnuf (A)	Fruits	Carminative, colic, headache, vermifuge, fatigue,	-
123	<i>Curcubitaceae</i> <i>Citrullus lanatus</i> Syn: <i>Citrullus vulgaris</i> Water melon (E)	Batikh (A) Ruqah (A) Habhab (A)	fruits	Digestive, scurvy, diuretic, fatigue	Protein, oil, vitamins A and E, calcium, Iron, Phosphorus
124	<i>Apiaceae</i> <i>Petroselinum sativum</i> Parsley (E)	Baqdunus (A) Maqdunas (A)	Roots	Diuretic, carminative, gastric ulcer, colic, kidney and liver diseases, appetizer, antisudorific, antipoison, jaundice, caluli, malaria, vermifuge, asthma blenorralgia	Vitamins A and B, calcium, iron, potassium, sulphur, phosphorus
125.	<i>Palmae Phoenix dactylifera</i> Date palm (E)	Annakhlatu (A)	Spadix, fruits, leaves, stems, roots	Uterine involution, antihypertensive, vermifuge, diarrhoea, blenorralgia, antipoison, fatigue, diabetess, hepatitis, renal problems	Calcium, phosphorus, iron, vitamins A and B, fibre, protein, oil, tulu balsam, bero balsam
126.	<i>Burseraceae</i> <i>Balsamodendron myrrha</i> Balsam (E)	Balsam (A)	Gum, resin, leaves, roots, barks	Eruption, rheumatism, dysentery, chronic gastric ulcer, vermifuge, inflammations	Brusic acid, resin, volatile oil, tulu balsam, bero balsam
127.	<i>Fagaceae Rhus toxicodendron</i> Syn: <i>Quercus infectorius</i> Oak (E)	Balut (A)	Fruits, Leaves	Blenorralgia, wound, boils, bed wetting, chronic cough, haemorrhoids, Gingivitis, stomatitis, diarrhoea, dysentery	
128.	<i>Asarum european</i> Hazel tree (E)	Bunduq (A)	Nut	Chronic cough, insect sting, emetic, diabetes Urethritis, epilepsy, diuretic, anaemia	Vitamins A and B, oil

Table 1. Cont'd.

129.	<i>Polygalaceae</i> <i>Securidaca</i> <i>longepedunculata</i> Violet tree (E)	Banafsaj (A)	Flowers, roots leaves, whole plant	Diuretic, analgesic, chest pain, antiemetic, renal, hepatic, gastric and urinary tract diseases, asthma, ophthalmia, whooping cough	Saponin
130.	<i>Lupines spp</i> Lupine (E)	Tiirmis (A)	Fruits ,leaves	Anthelmintic, herpetic eruptions, Diuretic	Protein, calcium, Phosphorus
131.	<i>Curcubitaceae</i> <i>Malus sylvestris</i> Apple (E)	Tufah (A)	Fruits	Anaemia , antipoison, emetic, anthelmintic, wound, boils, rheumatism, acidic urine, fevers, sialogogue, cholagogue, neuralgia, diurhoea, pneumonia, hepatic disease	Sugars
132.	<i>Caesalpiaceae</i> <i>Tamarindus indica</i> Indian tamarind (E)	Tamr-indiy (A)	Fruits	Headache, jaundice, antihypertensive, antiemetic	Tartaric acid, citric acid, tannin
133.	Marus spp Mulberry tree (E)	Tut (A) Farsad (A)	Leaves	Jaundice, hepatitis, cough, laxative, antidiurhoeic	Vitamins A and E
134.	<i>Moraceae</i> <i>Ficus carica</i> Fig (E)	Tin (A)	Leaves	Haemorrhoid, Jaundice, herpetic eruptions, boils, ear and oesophageal pains, chronic cough, nose bleeding, intestinal stasis, dysmenorrhoea	Sugar, calcium, phosphorus, iron, vitamins A,B and K
135.	<i>Liliaceae/Aliaceae</i> <i>Allium sativum</i> Garlic (E)	Fum (A) Thaum (A)	Bulbs	Toothache, chronic cough, chest pain, expectorant, diuretic, antipoison, diabetes, hypertension, influenza, prophylactic, antimicrobial	Allicin, alliin, alliinase, sulphur
136.	<i>Myrtaceae</i> <i>Syzygium cumini</i> Java (E)	Jawa (A)	Leaves, whole plant, roots	Sudorific, diuretic, tranquilizer, stimulant, digestive, asthma, rheumatism, antipoison, lymphangitis	Volatile oils
137.	<i>Cruciferae</i> <i>Nasturtium officinale</i> Water cress (E)	Jarjir (A)	Leaves, seeds	Stimulant, diuretic, dental caries, digestive, herpetic eruptions, hepatic and renal diseases, jaundice, diseases of blood vessels, antinicotinic effect	-

Table 1. Cont'd.

138.	<i>Apiaceae</i> <i>Daucus carota</i> Carrot (E)	Jizr (A)	Roots, leaves	Mucolytic, chest pain, cough, hepatic and gastric problems, diuretic, brain stimulant, coarseness of voice, digestive, fatigue, hypertension, nervousness, skin diseases	Vitamins A and E, phosphorus, sulphur, sodium, potassium, calcium, iron, magnesium, carotene
139	<i>Moraceae</i> <i>Ficus sycomorus</i> Sycomore fig (E)	Jamiz (A)	Leaves, juice, fruits	Oedema, aesthetic, warts, herpetic eruption, electuary for chronic cough, asthma, carminative, voice coarseness, wound	-
140	<i>Solanaceae</i> <i>solanum nigrum</i> Common night shade, Black night shade (E)	Jawaffa (A)	Fruits, leaves, roots	It is poisonous, caution should be exercised when taking it. Antidote for the plant poisoning	Solanine, solanidine, sugar, oils, protein, vitamin A, calcium, sodium, phosphorus, tannin
141	<i>Juglandaceae</i> <i>Juglans regia</i> English wall nut (E)	Jawz (A)	Leaves, fruits	Strangury, ricket, anaemia, diabetes, mange, scabies, pimples, inflammations, gonorrhoea, galactagogue, impotence, vermifuge, haemorrhage	-
142	<i>Myristicaceae</i> <i>Myristica fragrance</i> Nutmeg (E)	Jawztib (A)	Leaves, fruits	Strangury, splenic, hepatic and gastric diseases, anaesthetic, rheumatism, aphrodisiac, food sweetening, digestive	Myrcetin oil
143	<i>Palmae</i> <i>Cocos nucifera</i> Coconut (E)	Jawzulhind (A) Narajil (A)	Fruits, oil, leaves	Lumbago, aphrodisiac, haemorrhoids, scabies, eczema, freckles, mange, mucolytic, antipsychotic, ulcers, kidney and liver diseases, emollient hypercholesterolaemia	Protein, fatty acid, fibre, citric acid
144	<i>Cyperaceae</i> <i>Cyperus esculentus</i>	Habbuzzalmi (A) Habbussultan (A) Habbulaziz (A) Suqayt (A)	Seeds, leaves	Emollient, anaemia, aphrodisiac, annuria, antipsychotic, cough, liver and kidney diseases	-
145	<i>Rhanunculaceae</i> <i>Nigella sativa</i> <i>Black cumin</i> Black caraway (E)	Habbatul Baraka, Habbatus sauda, Shunaiz (A)	Oil, seeds, leaves	General ailments, carminative, mucolytic, ulcers, mange, diabetes, anti dote, asthma, hypertension, hepatoprotective, anti obesity, migraine, headache, haemorrhoid, tinea capitis, tinea pedis, expel rodents	-

Table 1. Cont'd.

146	<i>Moraceae</i> <i>Humulus lupulus</i> Hops, Humulus (E)	Hashishatu dinar (A)	Whole plant, flowers	Tranquilizer, appetizer, wounds, ulcers, nervous disorders, antiaphrodisiac, insomnia	Gum, oil
147	<i>Rosaceae</i> <i>Rosmarinus officinalis</i> Rosemary (E)	Haslaban (A)	Whole plant, flowers	Tranquilizer, antidiarrhoeic, diuretic, cholagogue, emmenagogue, stimulant, antihypertensive, cough suppressant, tinnitus, anaemia, ankylosis	Oil
148	<i>Leguminosae</i> <i>Trygonella foenum-graecum</i> Fenugreek, sickle fruit (E)	Hulbah (A)	Oil, leaves, roots, seeds	Cough suppressant, antiasthmatic, aphrodisiac, uterine, edema, colic, diuretic, galactagogue, asthma, cough, emmenagogue anaemia, pneumonias, anti inflammation, tuberculosis	Protein, gum, mannose, galactose, oil, saponin
149	<i>Umbelliferae</i> <i>Ferula asafoetida</i> Devil's drug, Asafoetida (E)	Hiltit (A) Abukabir (A)	Leaves, roots	Mucolytic, ophthalmia, oedema, chronic deafness, carminative, hepatoprotective, jaundice, antidote, splenitis, annuria, abortifacient, piles, vermifuge	Gum
150	<i>Malvaceae</i> <i>Hibiscus sabdariffa</i> Sorrel (E)	Himad (A) Hamid (A)	Flowers, leaves	Constipation, gall bladder problems, hypertension, diabetes, gout, diarrhoea	-
151	Tusilago (E)	Ashishatus- sual Khutwathimar Alfar far, Tusilaj (A)	Roots, flowers, leaves	Cough, chest disease, pneumonia, toothache, vermifuge, diarrhoea, rheumatic fever, hepatitis, skin diseases, pig diseases	-
152	-	Qustu Shammiyy (A) Rash (A)	Leaves, roots	Scabies, wound, chest disease, mucolytic, bronchitis, pneumonia, tuberculosis, antimicrobial, whooping cough, asthma, appetizer, laxative, gastritis, diuretic	Volatile oil, inulin, helenin
153	<i>Lauraceae</i> <i>Cinnamomum zeylanicum</i> Cinnamon (E)	Sinamik (A)	Whole plant, leaves	Laxative, chronic headache, migraine, piles, lumbago, aesthetic, arthritis, jaundice, cough, asthma.	Cinnamic cinnamon

Keys: A = Arabic, P = Persian, E = English, - = Unknown.

integration of the useful knowledge about - the listed plants into primary health care delivery system in Nigeria should be encouraged. The use of the plants would undoubtedly minimize the cost of treatment and limit side or toxic effects of orthodox medicines that are currently being used (Saganuwan, 2009).

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