

# Availability and Utilization of Traditional Medicinal Plants in Jerso Liyya Kebele, Leka Dulaacha Woreda, East Wollega, Ethiopia

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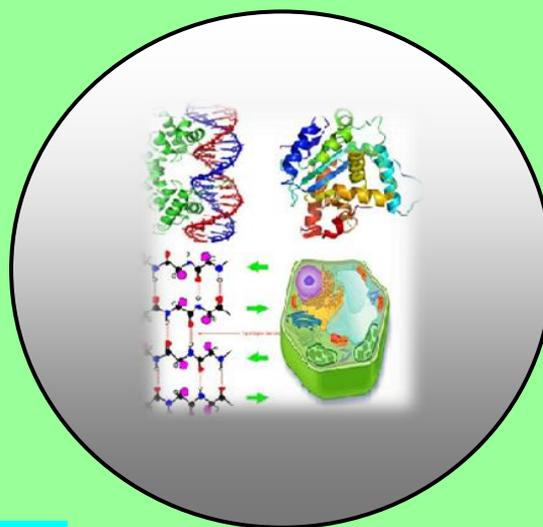
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# **Availability and Utilization of Traditional Medicinal Plants in Jerso Liyya Kebele, Leka Dulaacha Woreda, East Wollega, Ethiopia**

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**ABSTRACT**

*The usage of traditional medicinal plants is still an essential part of public healthcare. Recently, a dramatically increasing prevalence brought diabetes mellitus and its therapy to the focus of public health interests. Thus, this study was conducted to assess availability and Utilization of traditional medicinal plants being used to treat different human and animal illness at Jerso Liyya Kebele, Leka Dulaacha Woreda, East Wollega, Ethiopia. In an ethnobotanical survey in defined rural and urban areas randomly chosen identified to use traditional medicinal plants, were interviewed in a structured manner about their administration or use of. There were different medicinal plants belonging to different families that have been used to treat different allies at the study area. Traditional medicinal plants are commonly used in the study area o treat disease. The available data regarding the medicinal activity of the plants is not sufficient to adequately evaluate or recommend their use. Clinical intervention studies are required to provide evidence for a safe and effective use of the identified plants in the treatment of diabetes.*

**Keywords:** *Ethnobotanical survey, Traditional medicinal plants and Evidence-based medicine.*

**INTRODUCTION**

Popular availability and plant n utilized by humans is based on thousands of years experience by “trial and error “people – learn thought recognize utilize plants including those with magic religious function . Among the oldest test monies to plant utilize were the pollen remain of medicinal plant found on archeological dig at shani dar (Iraq ) these were about 60,000 years old from the Neanderthal period knowledge of plant utilize was

wide spreading ancient by civilizations until the middle of the 19 century , plants were the main therapeutic agents available by humans and even today their role in medicinal is still relevant ( lieyava, 1992)

The term ethno botany was coined in 1895 by north American botanist John Harsh begin to describe studies of plants utilized by primitive and aboriginal people “Balick and cox. 1996) By the end of the 19<sup>th</sup> century ethno botany had started to develop science providing a new tool for pharmaceutical research public institutions such as the world Health organization and private pharmaceutical company started invest founds in ethnobotanical expeditions to tropical regions (mainly in America and Africa) to gather in dangerous of medicinal Plants and collect samples for laboratory investigation ( Black and cox,1996) Medicinal plant resources in Africa are also the major source of income. In addition to do mestic trade Medicinal Plants Widely exported in large Volume to the international market. The continent comes second to Asian exportfiures (karan and vishaujtit, 2004)

The Ethiopian floras estimated to consist of between six and seven thousand species distributed in about 245 plant families. Although the expect number is still unknown large number of species I.e about 1/3 the families, have been employed in Traditional medicinal practices (Mesfin and sebesabe, 1992) In Ethiopia even though the traditional Medicinal practitioners are the best source of information about the knowledge of the medicinal plant. It was found very difficult to obtain their indgenousTraditiona medicinal information as the considered there in dangerous knowledge as professional secret.

In the contect of medicinal plant which probably growth to more scientific and a fully acceptable manner, locally used and acceptable manner locally used and assebttable plant and its product must be diffirentititoted. Before utilized event in the area of scientific and technology medicinal plant has great role in carousing different medicinal plant disease. Although in the mode of action and dosage are not exactly understand. Medicinal plant is those available in given enviroment utilized to treat disease of specific origin but not specific causative agent. these plants are not found any were uniformly and it is geographic and agro ecological dependet.In this research report, one must recognized and understand the value of medicinal plant It utilized , type , which medicinal plant to care which type of disease and the geographics distribution of the plant so the research mainly partially answer the question reused by different individually students academic and practical session of the study of biology and related subject matter. It also tries to clarify the value of altitude of learners and the community to ward medicinal plants and survive s way for further detailed research on the topic in such a way that the for coming student utilized it as are references material. Thus this study awls conducted to assess the availability and utilization traditional medicinal plant in Jerso Liyya kebele in Leka Dulacha Woreda.

## **MATERIAL AND METHODS**

### **Description of the Study Area**

The study was conducted at Jerso Liyya kebele in Leka Dulacha Woreda East wollega zone, Western Ethiopia from September 2014 to July 2015. The study area has dry and annual average rain fall got for about 6 months sand soil is the main soil type over the area and over green shrubs are characteristics vegetation type of the area. The socio economic activities of local population are depending up on farming. This involves both mixed cultivation of crops and raining of live stock (Walter, .2001).

### Sample and Sample Techniques

The current study was conducted at Jerso Liyya kebele Leka Dulacha woreda, East Wollega. Purposive sampling techniques were employed to select the study site, because the study site was near the working area of the research and are to some constrain. The researcher focused to do select this study. Random sampling techniques was applied select study participats, which have more experienced and good knowledge in relation to traditional medicinal plants. Therefore randomly 30 traditional practiones were selected. To gather relevant information about 30 questions were prepared in local language (Afan oromo) and distributed to respondents, the back translated to English. Analyses all Question were Filled and tern back to the principal investigator.

### Method Data Collection

An Ethno Medicinal plant species study data was selected from Jerso Liyy kebele, Leka Dulacha Eastern, Wollega Zone Eastern. Ethiopia from September 2014 to July 2015. Ethno Medicinal plant data were Collected from 39 randomly selected traditional plant healer's utilized semi structured interviews and participants |Observation . The traditional plant species healer were involved in the study were male and female and also their ages range from 25-95. The study illtrate able to read and write while few of them are an able to write and read. Inter views were made with each traditional healer about the knowledge and uses of medicinal plant species utilized to treat human disease in the study area. The healers were like professional. They practices who medicate local people by using ethno medicinal plants and their products. The interview were facilitated the local language of the people (by Afan Oromo). Verbal in formed content was obtained from each individual traditional medicinal plant specific healer who was participating during the field period voucher sample of each traditional medicinal plant species were also collected during the field visit it and allowed collection number.

### Method of data Analysis

The data which was collected from jarso Liya kebele Leka Dulacha district, Eastern wollega zone ,Eastern Ethiopia for medicinal traditional plant species where by analyzed after collecting the interview questioner and the interviews percentage , with table in order to indicate the number of respondants out of the total population and healer sampled.

## RESULT AND DISCUSSION

### Socio Demographic Characteristic of Respondents

This study was conducted to assess the utilization and availability of commonly used traditional medicinal plant and indigenous knowledge of practitioner and their attitude. Regarding to these plants species. It was emphasis on the respondent's information. Since it was survey study. Generally 30 practionariners were involved in this study. In general speaking most of the responds war eililtret and 100 of them were farms commonly depend of the forming activity. In addition all of them were men and totally they had no any knowledge how to conserve this medicinal plant and were secretary told to only fewtadirichi.

### Commonly Available and Utilized Medicinal Plants

The majority of the plant species used in these study area were listed in table (2).Mostly they were collected from habitat by indigenous people the study area poorly few of them were cultivated .

The study reported that about 30 family plants were commonly available and used to different human ailments to family name (Botanical family) Common scientific name pretty plant used, method of preparation and the type of disease that plants were used to treat are listed in table 2.

**Table 1. List of commonly used medicinal plants**

NO	Local name	Family Name (Botanically)	Scientific name	Plant part available	Method of preparation Utilize	Disease treated
1	Makanisa	euphorbiaceae	Crotona macrost	Terminal bud	Applying terminal bud over skin infection	Fung of the skin ring worm (robi)
2	Shankora	poaceace	Saccharum officinarum	Stem	Heating part of steamed eating	Common cold
3	Sunqoo	fabaceae	Trigonella foenum	seeds	Malting & drying powder dissolved in water	Gastric infection
4	Talba	Linaceae	linum catharticum	seeds	dissolved in water and drink	Gastric infection
5	Asangira	Solanaceae	Datura stramonium	Leaves	Crushing leaves and applying over the head	Wound of head
6	Dhummuga	Loranthaceae	Oliverella hildebrandii	leaves	Heating the leaves and applying over the infected body part	Cold
7	Qobboo Eu	Euphorbiaceae	Ricinus communis	leaves	Heating the leaves and applying over the infected body part	cold
8	Caatii	Celastraceae	Cathedula	Leaves bud		Tonsin
9	Xenadama	Rubiaceae	Rutapraeolens	Leaves & root	Drinking the leaves bud with tea (coffee) pounding the root & drink	- Common cold - Abdominal pain
10	Yeroo	Lamiaceae	Pycnostachya abyssinica	leaves	Heating the leaves and applying over the infected body	Eye infection
11	Qabarichoo	Asteraceae	Echinosiphis	roots	Infusion (steaming the root to plant)	Evil Sprite
12	Buna	Rubiaceae	Coffea arabica	Seed	- Powdering and drinking - Applying powder over the wound	-Headache wound
13	Yaattoo	Asteraceae	Acmella cuneifolia	flower	Chewing the yellow flower	Tonsin
14	Harkisa	Borraginaceae	Cynolossololantum	Jelly of the stem	Jelly of the stem apply over the fire wounds	Fire wounds

15	Ancootee	Cucurbitaceae	Concinia Abylsinicia	stems	Dry & powdering then eating rink with porridge	Back pain associated with delivery
16	Arangama	Agocynaceae	Carrissa spananum	Root	Heating the roots and applying over illest teeth	Tooth de livery
17	Qortobbii	plantaginaceae	Plant golacealed	Seed	Powdering the seed and applying the bodies	Bleeding bodies
18	Zinsibila	Zinjinber ceae	Zingiber officinace	Stem	Crusingand eating( drinking with tea	Common cold nausea
19	Bargamo adii	myrtaceae	Eucaly ptagalo bules	Leaves	Chewing leaves	Common cold influenza
20	Loomii	Cucurbitaceae	Cifrusauranti olia	Fruits	Applying over skin	Skin infection
21	Pappayyaa	Ciricaceae	caicpayya	Fruit	Applying fire wound	Fire wound
22	Gurraattii	Ranubcula ceae	Nigella atativa	Seed	Chewing cold	Common cold
23	Qulubbii diimaa	Alliaceae	Alliumati cepal	Leaves	Eating the leaves	Common cold
24	Qullubbii adii	alliaceae	Allium sativum	Stems	Peeling the over then eating with food	Common cold mararia ancbiotic and cardia cular
25	Sinaafica	Amarathaceae	Spinacialera ceal	Seed	Powdering and eating	Gastero in bestinal air ments
26	Raafuu	Baceaer assic	Brassical ar inte	Leaves	Cooking leaves and eating	Gastiric infetion
27	Ija raafuu	braciceae	Brassica carinatal	seeds	Todis salving with samt	Back pain associated with delivery
28	Eebich	Asteraceae	Vornonia amy of dalina	leaves	Brushingena me of teath	Removing bacteria from the teeth
29	Shinfa			Seed	Powdering seeds and eating with food	Warms of flarie
30	Geeshoo	Rhmnaceea	Rhmnnes prinoids	Leaves	Chowing leaves	Tonsil

Therefore, the information regarding to various skill concerning method of plant preparation, which include the plant composition condition of plant used fresh fruit. , seed, dried stem: method of preparation such as crushing, powered, squeezed are also and listed in the table. There is also various method of traditional medicinal plant in the area. The most popular made of preparation was the form of crush which accounts more percent: next powered Making and sequencing.

**Table 2. Socio demographic characteristic.**

Socio demographic	Frequency	Percent
Age		
25-29	3	10
30-34	12	40
35-40	10	33.33
41-45	5	16.66
Marital status		
Divorced	13	43.33
Married	15	50
Void owed	2	6.66
Ethnicity		
Amharic	1	3.33
Oromo	29	96.66
Educational back ground		
Above grade 8	14	46.66
diploma	3	10
Certificate	4	13.33
Illiterate	8	
Religion		
Muslim	3	10
Orthodox	10	33.33
Protestant	17	56.66
Place of residency		
Rural	30	100
Urban	0	00
Merchant	4	13.33
Farmers	23	76.66
employer	3	10.00

#### Parts of plants used for medicinal treat of different human illness

To reference to table3, different plant parts were used for treating human illness. Specially regarding to some plant family maintain them were communally emphesision laves. Therefore, the most popular plant parts used for medicinal realer among traditional practitioner were leaves which accounts 33.33 40 followed by seed (dried- seed (26.7%) Dried steam C (6.66); root (6.61 and respecting while the last one was gross , leaves and root, terminal which accounts 3-5, respectively.

**Table 3. Plant part utilize for medicinal plant remedying percent (%).**

No	Parts of plant utilized	Number	Percent (8)
1	Flower	1	3.3
2	Root	2	6.6
3	Seeds	8	26.7
4	Terminal bud	1	3.3
5	Stem	5	16.7
6	Fruit	2	6.6
7	Leaves	10	33.3
8	Leaves and root	1	3.3
9	Total	30	100

Concerning the method of preparation to utilize these medicinal plants, the traditional practitioners were applying the following method.

✓ Chewing the selected plants parts were collected at leaves cleared other by adding or mixing with other ingredients.

✓ Crushing, spacing, and making powered of the various parts of medicinal plants species for treating of the human limited.

Regarding to utilization of commonly available traditional medicinal plants the following were the most common problems that medicinal plant were used to treat human illnesses.

➤ To treat common colds, or to relieve nausea, tonsil Headshake. Fire wounds, tooth decay, bleeding bodies (antibiotic skin infection, Gastric infection).

Part of administration to utilization of the medicinal plant parts was root administration:-

Eating with food, drinking with coffee or tea, brushing animal, peeling the cover lene and steaming.

## DISCUSSION

Traditional medicinal plants have some adverse effect with exception of vomiting and in floatation, since the die of the utilization is not fixed. Therefore, it needs for traditional healers. To undergo training in basic health care delivery (Giday 2009). Traditional healers should be encourage to transfer their knowledge to interested person in their community, as most of the medicinal plants are wild and cultivated for their root to prepare remedies, the healer in insulations with governmental office should take care not to irradiated the medicinal plants ensure sustainability of by establishing, nurse is for common availed traditional plants so as to carb devastation as it is associated (Giddy, 2009).

A wariness area action among the traditional healers and community at large important in order to pressure the indigenous traditional medicinal plants species. Correlation measuring such as area, cloche, where by benisplaced for farming growing tree, felling will help to minimize environmental degradation and the attempt global community (Endaflan, 2007) In the presents stud 30 plant identified (Table 2). Most people harvest more medicinal plants from wild than gardens. Main traditional medicinal plants were recoding all plants were also reported to treat more than 10 human ailments /there need an urgent attention to conserve such resources in order to optimize their use in the primary health care system. Some studies have shown that most of the traditional medicinal plants used in Ethiopia are harvested from the wild.

According to the study conducted by alcoun (1991) some important information regarding to knowledge of indigenous plants were also respond and this is slow with the presents study. This information was only transmitted from generation to generation verbally and indigenous knowledge develops and changes are time and specie.

Ethno botanical knowledge on plant involves traditional dieprosis collected of row materials preparation of the indigenous knowledge on plant remedies in vary country is development like Ethiopic pass from one generation to other generation variably with greet secretly such seriate and verbatitrans females the indigenous knowledge to ethnic medicinal knowledge tolerable at each point of transfer (Amare, 1976). LeVile the need for systematic documented such a use full knowledge dawn days through ethno botanical reserch.Traditional healers were found to play in an important role in primary health care system to local pesler the trait people who lad total access and could not afraid e cost of modern medicine . According to so to warra (1987) about 65-85% of the population in every country of the developing, wild rely on traditional medicinal plants because of lack of certain in the structure like hospitals and health care; since traditional medicinal plants for rural population who compared to modern medicines ethno - botanical activities need special consideration and back up[ Abbiw, 1996).S this is partly because of modern medicinal services are either un effused able on unreliable to the lost majority of local people due to their sky rocketing cost couple to lack of transport to and from health care center.

## RECOMMENDATION

This study was take with understanding that the utilize of effective medicinal traditional plants species can reduce formers in put most Preserver the resource base, enhance the biodiversity and protect human health. Medicinal plants are in separable from local liveli hoods because they have long been collected.

Generally, this study recorded the used of 30 plants species parts of plants utilized and method of preparation for human being health care system. The demand for indigenous medicines and service is considerable relative the health care service. The poor population in Jerso Liyya kebele indicated that they relied on the health care system and indigenous medicine.

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