

Herbal folk remedies on diabetes from Malegaon region of Nasik District

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Abstract

The present paper communicates the documentation of herbal folk remedies used specially against diabetes by the tribal and rural people of Malegaon region. It reveals 25 plant species belonging to 24 genera and 19 families of angiosperms. The medicinal recipes viz. powder; decoction, juice, infusion and extract are employed during treatments using various plant parts or products. The vernacular plant names, scientific plant names, family, type of recipes and doses, etc. are presented. This information may help reveal new or alternate sources of herbal drugs on critical scientific examination.

Keywords: Folk Remedies, Diabetes, Malegaon Region

1. Introduction

The tribals and rural folks in Malegaon region sustain their healthcare on plant-based drugs for combating different ailments and disorders. They mostly belong to economically weaker sections of the society and the modern healthcare amenities are beyond their reach. The objective of the present investigation was to document ethnomedicinal and miscellaneous claims by the various tribal and rural folks in Malegaon region. Some cursory attention to the traditional utility of plants have been studied recently by Sharma and Lakshimanarsimhan (1991) [4] and Patil & Patil (2000) [7]. These contributions also prompted the present authors to tap information from hitherto unstudied region

Now a day's diabetes is a global problem. So, present investigations aimed to find medicinal uses of native plants of the study area used for diabetes. The discovered traditional home remedies will provide the basis for clinical research in

order to establish their therapeutic properties of various formulae.

2. Methodology

The approaches and methodologies have been followed as suggested by Jain (1991) [2] during field work. Ethnomedicinal data was gathered since 2015 from local inhabitants, farmers, tribal heads and elder medicine men. The reports were cross-checked during subsequent field visits. Plants or their parts or botanicals used for culinary purposes were collected. They have been deciphered by using district regional and state floras. (Patil, 2003; Kshirsagar and Patil, 2008; Naik 1998; Cooke 1958; Sharma *et al*, 1996; Singh and Kartikayen 2000-2001) [6, 3, 5, 1, 9, 10]. Local plant names, medicinal recipes, doses and mode of application, besides diseases treated, were noted during different field visits. They are arranged alphabetically.



Author Dr. P. S. Patil during interaction with local informant.

3. Ethnobotanical Enumeration

- 1) *Aegle marmelos* (L.) Corr. (Rutaceae) **Bel**
Fruit pulp about two gm is given twice a day to person suffering from diabetes.
- 2) *Allium cepa* L. (Liliaceae) **Kanda**
Bulbs are boiled in water. They are extracted. Two spoonful of extract is advised twice a day for three to

four days to the patients suffering from diabetes.

- 3) *Aloe vera* L. (Liliaceae) **Ghikumar**
Leaf pulp, about one spoon, is consumed for forty days at morning to treat diabetes.
- 4) *Balanites aegyptiaca* (L.) **Delile** (Balanitaceae) **Hingot**
Leaves are warmed and then juice is obtained. It is mixed in cow-milk in 1:1 ratio. A cup of it is drunk at morning

- for three days to cure diabetes.
- 5) ***Cassia auriculata* L.(Caesalpiniaceae) Walanya, Tarvar**
About half cup of leaf extract is taken orally early in the morning to treat diabetes, It is practiced for a week.
 - 6) ***Cassia fistula* L. (Caesalpiniaceae) Bhawa**
Extract of leaves about a cup is taken orally along with Spoonful of cow ghee twice a day for seven days to treat diabetes.
 - 7) ***Catharanthus rosesus* (L.) G. Don (Apocynaceae) Sadaphuli**
Leaves and flowers are dried under shade and is ground to make powder. Spoonful of powder is administered twice a day patient suffering from diabetes.
 - 8) ***Citrus aurantifolia* (Christm.) SW. (Rutaceae) Nimboo, Limboo:**
Raw fruit juice, about 10-15 ml, is drunk daily to control diabetes.
 - 9) ***Coccinia indica* Wight and Arn.(Cucurbitaceae) Tundica**
Extract obtained from the fresh leaves of plant mixed with water. About 10 ml of extract is used thrice a day to treat sugar.
 - 10) ***Daucus carota* L.(Apiaceae)Gajar**
Decoction of seeds, (5gm) is taken orally for seven days to treat diabetes.
 - 11) ***Emblica officinalis* Gaertn. (Euphorbiaceae) Awwa, Aawala**
The dried fruits of the plant are ground to make powder. About half small teaspoon is given with glass of water before breakfast daily for a month. It is claimed by the inhabitants that it is an effective therapy for the treatment of diabetes.
 - 12) ***Ficus glomerata* Roxb.(Moraceae) Umbar, Gular**
The latex obtained from the aerial parts of the plant (leaves and young branches) and mixed with honey and used orally to control high blood glucose level.
 - 13) ***Helicteres isora* L. (Sterculiaceae)Morarphali**
Seeds are dried and powdered. One spoonful twice a day with milk, honey or water is administered against diabetes.
 - 14) ***Madhuca longifolia* (Koen.) Macbr. (Sapotaceae) Mahua**
Hot water extract made from the dried flowers of plant is used to reduce blood glucose level of diabetics. This hot tea was very common among the local people of the area.
 - 15) ***Melia azedarch* L.(Meliaceae)Bakam**
Extract of flowers about 20 ml is taken thrice a day for a period of one month to treat diabetes.
 - 16) ***Melilotus alba* Medik.(Fabaceae)Ban-Methi**
Few seeds are boiled in 200 ml of cow's milk with few seeds of *Syzygium cumini* (Linn.). The decoction obtained is taken twice a day for a period of one month to treat diabetes
 - 17) ***Ocimum basilicum* Linn.(Labiatae)Tulsi**
Dried flowers are powdered. A spoonful of powder consumed along with honey twice a day for seven days to treat diabetes.
 - 18) ***Ocimum tenuiflorum* L. (Labiatae) Tulsi**
Infusion of dried roots, about half cup, is given once a day to control sugar level in cure of diabetic patients.

- 19) ***Psidium guajava* L.(Myrataceae)Amrood, Jam**
The juice obtained from the fresh leaves is used, one tea spoon thrice a day. This is given for the control of blood sugar and high blood pressure amongst the diabetics.
- 20) ***Solanum virginianum* L. (Solanaceae)Kateli**
One teaspoon of leaf and flower powder is taken with a glass of cow's milk once a day for a period of 3 weeks to treat diabetics.
- 21) ***Syzygium cumini* (L.) Skeels (Myrtaceae) Jambun**
Seed powder about two spoonfuls, administered twice in day to a patient suffering from diabetes for 7 days.
- 22) ***Tinospora cordifolia* (Willd.)Miers ex Hook. f. and Thorns. (Menispermaceae) Giloy**
The decoction obtained by continuously boiling some shade dried stem pieces and few shade dried leaves of *Azadirachta indica* A. Juss. In 200 ml of diluted cow's milk is taken twice a day for a period of 2-3 weeks to treat diabetes
- 23) ***Trigonella foenum-graecum* L.(Fabaceae)Methi**
About two gm of seed powder consumed along with leaf of *Piper betle* L. to regulate sugar level. It is advised for two to three days.
- 24) ***Vigna radiata* (L.) Wilczek.(Fabaceae) Udidya**
Green seeds are crushed and mixed with goat- milk. A cup of mixture is given twice a day to treat diabetes. It is practiced for two to three days.
- 25) ***Ziziphus mauritiana* Lam.(Rhamnaceae) Ber**
Shade dried fruits are powdered. Spoonful of powder drunk along with glass of water to reduced sugar level.

4. Results and Discussion

The paper reports results of our studies on Herbal Folk Remedies on Diabetes as adducted since April 2015 in Malegaon region of Nasik district Maharashtra. It particularly contains information of diabetes in tribal and rural peoples in the region. In all, 25 species belonging to 24 genera and 19 families of angiosperms are recorded to combat diabetes. Of these, twelve species belong to trees, nine belongs to herbs, whereas others are shrubs or lianas. Only two species are used to supplement the crude drug viz., *Syzygium cumini* (Linn.) and *Piper betle* L.

These species have popular ethnomedicinal value against diabetes among the local people. The traditional recipes are in the form decoction, infusion, extract, juice, powder, etc. Various plant parts such as leaves (mature or young, dried or fresh), fruits (ripe or unripe), roots, stem, young twig, flowers seeds, entire inflorescence or even entire plants are used to prepare them.

The present study reveals that the gathered information of specie have been in use in the region for a long past. These are very effective and powerful against the diabetes. The data gathered may thus be used for further chemical, pharmacological and clinical examinations.

5. References

1. Cooke T. The Flora of the Presidency of Bombay. B.S.I. Calcutta (Repr.Ed.). 1958, 1-3.
2. Jain SK. Dictionary of Indian Folk Medicine and Ethnobotany. Deep Publication, New Delhi, 1991.
3. Kshirsagar SR, Patil DA. Flora of Jalgaon District (Maharashtra). Bishen Singh Mahendra Pal Singh, Dehradun, India. 2008.

4. Lakshimanarsimhan P, Sharma B D. The Flora of Nasik District B.S.I. Calcutta, 1991.
5. Naik VN. Flora of Marathwada Amrut Prakashan, Aurangabad, India. 1998, 1- 2.
6. Patil DA. Flora of Dhule and Nandurbar Districts (Maharashtra). Bishen Singh Mahendra Pal Singh, Dehradun: India, 2003.
7. Patil MV, Patil DA. Folk Medicine of Nasik District (Maharashtra), India. Ancient Science of Life 2000, XX.
8. Sharma BD, Lakshminarsimhan P. Ethnobotanical studies on the tribals of Nasik District (Maharashtra). J Econ. Tex Bot 1986; 8:439-454.
9. Singh NP, Kartikeyan S. Flora of Maharashtra State: Dicotyledons (Asstt. Lakshminarsimhan P. and P.V. Prasana) Bot. Surv. India, Calcutta, India, 2000, 1.
10. Singh NP, Lakshminarsimhan P, Kartikeyan S, Prasana PV. Flora of Maharashtra State: Dicotyledons Bot. Surv. India, Calcutta, India, 2001, 2.