An Ethnobotanical survey of Medicinal plants used by ethnic people in Bodhan, Nizamabad district, Telangana state, India.

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Abstract: This study was carried out in Bodhan area of Nizamabad district, Telangana state, to document the traditional knowledge of local people on medicinal plants, and to investigate the distribution, abundance, taxonomic diversity and biological activity of medicinal plants. The Use of herbal medicines in Asia represents a long history of human interactions with the environment. Plants used for traditional medicine contain a wide range of substances that can be used to treat chronic as well as infectious diseases. Field trips were conducted and ethnomedicinal data were collected through conversation with traditional healers', and elder people in the field trips. During the interviews local names, useful plant parts, method of preparation and dosage were recorded. In the present account, 30 species belonging to 21 families are reported. They are used as ethnomedicines for various severe diseases like jaundice, cancer, etc. According to the data collected from Nizamabad district Bodhan people, pertaining to the treatment of various ailments, Plant parts like bark, roots, leaves, fruits, flowers, Stem, seeds were used and in some preparations whole plant was also used. The most frequently utilized plant parts were leaves followed by the roots seeds Stem bark fruits Stem flowers in the form of decoctions, extracts, paste, juices and powders.

Key words: Bodhan, traditional, ethnomedicines, folk and herbal medicine.

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I. INTRODUCTION

The plant-based traditional medical systems continue to provide the primary health care to more than three-quarters of the world's populace. The World Health Organization has estimated that over 80% of the global population relies chiefly on traditional medicine. Indigenous herbal treatment is a part of the culture and dominant mode of therapy in most of the developing countries. These traditional phytoremedies, with a considerable extent of effectiveness, are socially accepted, economically viable and mostly are the only available. In India, the use of plants for medicinal treatment dates back to 5000 years. It was officially recognized that 2500 plant species have medicinal value while over 6000 plants are estimated to be explored in traditional, folk and herbal medicine. Plants used for traditional medicine contain a wide range of substances that can be used to treat chronic as well as infectious diseases. Most commonly used plants for medicinal purposes are Phyllanthu Amarus, Hemiessmus Indicus(L), Withania sominifera, Butea Monosperma(L), Alternanthera Sessilis. Unfortunately, such knowledge of peopole has only oral traditions without any written documents. Due to the changing life style of people and fast urbanization, the Ethnobotanical knowledge on useful plants acquired are accumulated through generations is gradually getting lost. Hence, documentation of the indigenous knowledge of wild plants has become imperative lest the vital clues they hold for the quality of life of the modern man would be lost forever. During the course of exploration of ethnomedicinal plants of the bodhan area of Nizamabad district, the information's have been gathered from the healers of rural villages found near forest areas where the people depend mostly on forests for their need and have sound knowledge of herbal remedies. This study was carried out in the different villages of Bodhan Mandal (Achampalle, Amdapur, Bardipur and Bhandarpalle) of Nizamabad district, Telangana state, to document the traditional knowledge of local peoples on medicinal plants and to investigate the distribution, abundance, taxonomic diversity and biological activity of medicinal plants. The aims of this study is to document the ethnomedicinal knowledge of traditional healers in Bodhan area of Nizamabad District, Telengana State.

II. STUDY AREA

Bodhan is a town in Nizamabad district of the Indian state of Telangana. Bodhan is primarily known for the Nizam Sugar Factory and some historical sites. As of 2011 India census, Bodhan had a population of 77,573. Males constitute 50% of the population and females 50%. Bodhan has an average literacy rate of 66%, lower than the national average of 74.04%; with male literacy of 71% and female literacy of 61%. 11% of the population is under 6 years of age. Bodhan Municipality was constituted in 1952 and is classified as a *second grade municipality* with 35 election wards. The jurisdiction of the civic body is spread over an area of 21.40 km² (8.26 sq mi).

III. MATERIAL AND METODS

Bodhan area of Nizamabad District, Telengana State. The Bodhan is known for its ethnic life style. It can be said that Bodhan area of Nizamabad district has as strong historical lineage and at the same time in the present day the district also continues with its process of advancement. The following

Traditional medicinal plants used by Bodhan area of Nizamabad District people

1. Botanical name: Phyllanthu Amarus

Local name: Nalla Usiri Family: Euphorbiaceae Useful part: Fruit

Medicinal importance: Ring worm, Jaundice, Fever

2. Botanical name: Oroxylum Indicam

Local name: Namale Tree Family: Bignoniaceae Useful part: Leaves

Medicinal importance: used for all bodyPains

3. Botanical name: Tinospora Cordfiolica

Local name: Tippatheega Family: Menispermaceae Useful part: Leaves

Medicinal importance: Diabetes & Sugar

4. Botanical name: Hemiessmus Indicus(L)

Local name: Sugandi Pala Family: Asclepiadaceae Useful part: Roots

Medicinal importance: Tooth ache

5. Botanical name: Citrus Limon Diarrhoea

Local name: Limon Tree Family: Rutaceae Useful part: Fruit

Medicinal importance: Dandruff, & Hair fall

6. Botanical name: Trigonella foenumgraecum

Local name: Menthulu Family: leguminoceae Useful part: Leaves

Medicinal importance: skin diseases

7. Botanical name: Mimsa Pudica(L)

Local name: Atti Patti Family:Mimosaceae Useful part: Leaves

Medicinal importance: Filaria and Blood Pressure

8. Botanical name: Aristolochia Indica

Local name: Nalla Eswari

Family: Aristolochiaceae Useful part: Root

Medicinal importance: Snake Bite

9. Botanical name: Trodax procumbens **Local name:** Nallaalam (Gaddichamanthi)

Family: Astaraceae Useful part: Leaves

Medicinal importance: Wound healing

10. Botanical name: Withania sominifera

Local name: Ashwagandha Family: Solanaceae Useful part: Stem-bark

Medicinal importance: Fertility improvement of male

11. Botanical name: Vitex nigunda

Local name: Nalla Vaavili Family: Lamiaceae Useful part: Leaves

Medicinal importance: All body pains

12. Botanical name: Ailanthus Excelsa

Local name: Peddmamu Family: Simaroubaceae Useful part: Root

Medicinal importance: Abscess

13. Botanical name: Pongamia Pinnata

Local name: Kanuga chettu

Family: Fabaceae Useful part: Leaves

Medicinal importance: Blood Pressure Paralysis& Pains

14. Botanical name: Aloe Barbadensis

Local name: Aloe-Vera Family: Agavaceae Useful part: Stem

Medicinal importance: Skin Allergy & Ladies White Discharges

15. Botanical name: Momordica Charantia

Local name: Kakarakaya Family: Cucurbitaceae Useful part: Leaves

Medicinal importance: Jaundice Diabetes

16. **Botanical name**: Mucuna prurita

Local name: Dulagondi Family: Fabaceae Useful part: Whole plant

Medicinal importance: Tooth ache

17. Botanical name: Teprosia purpurea

Local name: Vempali Family: Fabaceae Useful part: Whole plant

Medicinal importance: Urinary problems, diabetes

18. Botanical name: Alternanthera Sessilis Amaranthaceae Root

Local name: Ponnagantikura

Family: Amaranthaceae Useful part: Root

Medicinal importance: Ladies White Dicharges

19. Botanical name: Datura Metal(L)

Local name: Erriummetta Family: Solanaceae Useful part: Leaves

Medicinal importance: used for skin diseases

20. Botanical name: Butea Monosperma(L)

Local name: Moduga
Family: Fabaceae
Useful part: Leaves

Medicinal importance: for all pains

21. Botanical name: Tylophora Indica **Local name:** meka meyani teega

Family: Asclepiadaceae Useful part: Leaves

Medicinal importance: Anti-diabetic & Asthama

22. Botanical name: Moringa olifera

Local name: Munaga Family: Moringaceae Useful part: Root

Medicinal importance: Skin diseases

23. Botanical name: Ficus Religiosa

Local name: Ravi Family: Moraceae Useful part: Stem bark

Medicinal importance: Hepatitis, anti-diabetic & STD's

24. Botanical name: Ricinus Communis (L.)

Local name: Amudamu Family: Euphorbiaceae Useful part: Stem Bark

Medicinal importance: Pains& Jaundice

25. Botanical name: Achyranthes Aspera

Local name: Uttareni Family: Amaranthaceae Useful part: Root

Medicinal importance: Tooth Ache

26. Botanical name: Pergularia Daemia

Local name: Dustapu Teega Family: Asclepiadaceae Useful part: Leaves

Medicinal importance: used for Fever

27. Botanical name: Calotropis Gigantea

Local name: Jilledu Family: Asclepiadaceae Useful part: Flower

Medicinal importance: Cramps, Arthritis& Pains

28. Botanical name: Psidium guava

Local name: Jama Family: Myrtaceae Useful part: Fruit

Medicinal importance: Mouth ulcers

29. Botanical name: Zingibar officinale

Local name: Sonti Family: Zingibaraeae Useful part: Root

Medicinal importance: Asthma and Fever **30. Botanical name:** Phyllanthus Emblica

Local name: Usiri Family: Phyllanthaceae Useful part: Fruit

Medicinal importance: anti-diabetic & Skin diseases

IV. RESULTS AND DISCUSSION

In the present account, 30 species belonging to 21 families are reported. They are used as ethnomedicines for various severe diseases like jaundice, cancer, etc. by employing the preparations in the form of extracts, pastes, juices, powders, etc. Other common diseases and health complaints like Abortion, Anti inflammations, Asthma, Arthritis, Blood Pressure, Cough, Dandruff, Diarrhea, Fertility improvement of male, Fever, Filaria, Jaundice, Kidney disease, Ladies White Discharges, Muscular Pains, Pains, Ring Worm, Sugar, Scorpion Bite, Skin Diseases, Snake Bite, Tooth ache, Wound healing are cured by using of various plants found in the tribal healers of Bodhan, Nizamabad District, Telengana State.

V. CONCLUSION

The present investigation revealed that medicinal plants still play a vital role in the primary health care of the people and this study also generated a broad spectrum of information concerning medicinal plants used by Bodhan people.

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REFERENCE

- [1] Pullaiah T and Ravi Prasad Rao B. Flora of Nizamabad, Andhra Pradesh India, BhisensinghMahendrapalsingh, Dehradun, 1995.
- [2] Ravishankar T, Ethnobotanical studies in Adilabad and Karimnagar districts of Andhra Pradesh, India, (Ph.D. thesis, Bharathiar University, Coimbatore), 1990.
- [3] JAIN S.K., 1991. Dictionary of Indian Folk Medicines andethno botany. Deep Publications, New Delhi.
- [4] Reddy S.D., 2015. Ethno botanical study of bodycoolants used by tribal's of Nallamallais in Telangana, India, inter. National Journal of Advance Research, Vol 3, issue 4,411-415.
- [5] Rajashekaran B., Michael warren D., Suresh ChandraBabu., 1994. Farmer participatory approaches to achieve fodder security in south Indian villages. Agriculture and human values, 11 (2-3), 159-167.
- [6] Pullaiah T., Ali Moulali.,1997. Scientific Publishers, Jodhpur, India, Vol -2 ISBN: 81-7233-134-7.
- [7] Pullaiah T., Surya Prakash Babu., 1997. Scientific Publishers, Jodhpur, India, Vol 4 ISBN: 81-7233-
- [8] Nadkarni A.K.,1982. Indian Material Medica Popular Prakashan Bombay, Vol I&II (reprinted). Pullaiah T., Chennaiah E.,1997. Scientific Publishers, Jodhpur, India, Vol -1 ISBN: 81-7233-133-9

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