Ethnobotanical Survey of Sariska and Siliserh Regions from Alwar District of Rajasthan, India

¹S.C. Jain^{*}, ²R. Jain and ¹R. Singh

 ¹Medicinal Plants and Biotechnology Laboratory, Department of Botany, University of Rajasthan, Jaipur-302004, India
 ²Department of Chemistry, University of Rajasthan, Jaipur-302004, India * Corresponding author's e-mail: jainnatpro3@rediffmail.com

Issued 30 January 2009

Abstract

The aim of present survey is to identify and document the plants used amongst the indigenes of Sariska and Siliserh regions of Alwar district from Rajasthan, India. A total of 110 species of plants representing 88 genera and 43 families employed in the literature as traditional medical practice have been recorded from the studied regions. Ailments such as fever, diorrhoea, dysentery, skin-problems, jaundice, rheumatism etc. are mostly treated with the different medicinal plants. Due to overgrazing, encroachments, unsustainable utilization and other developmental activities in the regions, several persistent medicinal plant species are on the verge of extinction. Due to lack of awareness and research on these groups of plant in this area, people of this region are unaware of the wealth of this heritage. The survey provides a veritable source of information for traditional medical practitioners and medicinal plant researchers and help in developing strategies for future conservation. **Keywords:** Ethnomedicinal survey, Sariska and Siliserh, Alwar District, Rajasthan.

Introduction

The World Health Organization (WHO) Traditional Medical Programme (Farnsworth *et al.*, 1985) has provided the evidence that ethnomedical information can lead to valuable

drug discovery. A total of 122 compounds, 80% of which were used for the same or related ethnomedical purposes, were derived from 94 species of plants (Ajibesin *et al.*, 2008).

Several active compounds have been discovered from plants on the basis of ethnomedical information and used directly as patented drugs. Maprouneacin isolated from *Maprounnea africana* is used as an antidiabetic agent (Carney *et al.*, 1999), taxol, obtained from *Taxus breviflora*, is used as an antitumor drug (Samuelsson 1992) and artimisinin, discovered from *Artemisia annua*, is used as a potent antimalarial compound (Klayman 1993). In Rajasthan State, many ethnobotanical studies on medicinal plant resources have been carried out by Kirtikar and Basu (1984), Joshi (1995), Katewa and Guria (1997), Singh and Pandey (1998), Katewa *et al.* (2001, 2004), Jain *et al.* (2004) but the serial documentation of various areas is still lacking.

The aim of present study is to document properly the biodiversity of medicinal flora of targeted regions to provide safety and efficacy information to encourage the preservation of culture, tradition, conservation and sustainable utilization of plant wealth occurring in the area.

Study areas

Alwar District is situated in the north-eastern part of Rajasthan at 27.57° N and 76.6° E. It has an average elevation of 271 metres (889 feet). The length of the district is 137 km² while its breadth is 110 km² approx. The district is surrounded by Bharatpur district in the north-east, Jaipur in the south-west, Gurgaon (Haryana) in the north, Mahendragarh district (Haryana) in the north-west and Sawai-Madhopur district in the south. As of 2001 India census, Alwar had a population of 160,245. Males constitute 53% of the population and females 47%. Alwar has an average literacy rate of 73%, higher than the national average of 59.5%; with 59% of the males and 41% of females literate. The district has a dry climate with hot summer, a cold winter and a short monsoon season. During summers the maximum temperature is around 41°C and minimum is around 28°C and in winters maximum temperature is ~ 23°C and minimum ~ 8°C. The normal annual rainfall in the district is 57.77 cms with 70% average humidity. The sandy soil and bright sunlight are the two important natural resources abundantly

available in this region which are responsible for for the development of the desert vegetation having variable medicinal properties.

Sariska National Park is located in Alwar district (27°35'N and 76°39'E) in the eastern part of the State of Rajasthan. The park covers an area of 800 km² including 480 km² in the core area and 320 km² in the buffer zone. Sariska National Park, which is a Project Tiger reserve, also boasts of many other species, including rare birds and plants. Being located on the desert land of Rajasthan, the flora and fauna of Sariska is characterized by scrubthorn arid forests, dry deciduous forests, rocks and scanty grasses spread over the hills and narrow valleys of the Aravalli hill range.

Enroute to Sariska, 12 km² south west of Alwar is the water places of Siliserh with a lake surrounded by low, wooded hills. The lake was built in 1845 A.D. by constructing an earthern dam between two hills to store the water of a small tributary of river Ruparel. When full, the total water spread covers an area of about 10 sq. km². Adorned with domed cenotaphs, Siliserh lake is picturesquely set amidst the forested slopes of Aravalli hills. Previously Singh (2002; Table 1) and Yadav (2005) worked on the ethnobotanical survey of the flora of different regions of Alwar district but this was the first attempt in these selected areas.

Methodology

For documentation of the available medicinal flora, ethnobotanical surveys were conducted in 2006-2008, randomly selected villages following the procedure as described by Jain (1967). These specimens were collected and identified by one of the author Prof. S. C. Jain and confirmed by Herbarium, Botany Department, University of Rajasthan, Jaipur and also with the help of published data (Jain, 1991; Kirtikar and Basu, 1984; Shetty and Singh, 1987). Using the standard protocol (Muthu *et al.*, 2006), collected voucher specimens were pressed, dried, mounted, prepared and preserved for further reference. Questionnaires were used during field surveys to collect information from the villagers. A total of 100 inhabitants, of which 70 were men and 30 were women were interviewed. For traditional uses of medicinal plants questions were asked to elder and key informants. Repeated

queries were made to get the data confirmed. Results from the field surveys were rechecked and compared with literature.

Results

A total of 110 species of medicinal plants representing 88 genera and 43 families employed in the literature as traditional medical practice have been recorded from the studied regions (Plate 1), that are used to treat a variety of human and animals (Table 2). The highest number of medicinal plant species belong to the families Euphorbiaceae and Fabaceae (9 species); Amaranthaceae, Asteraceae and Malvaceae (7 species) and Convolvulaceae and Solanaceae (5 species). These plants have different growth habits which include herbs (63.63%), shrubs (20.90%) and trees (10.90%). This study established that many different parts of the medicinal plant species are used as medicine (root, stem, leaves, whole plant, flowers, bark, etc.) but the most commonly used plant part was leaf (23.02%), followed by whole plant (17.98%), root (17.26%) and seed (12.23%). These plants have been used as medicine more because leaf, root and whole plant may contain more active principle (s) in comparison to wood, twigs, pods, berries, and latex. In total 99, medicinal plants were found to be used to wounds, menstrual trouble, urinary complaints, dysentery, inflammation, asthma, ulcers, rheumatism, skin-diseases, gonorrhea, fever, scabies, gastric disorder, malaria, elephantiasis, etc.

Discussion

In drug discovery, ethnobotanical and ethnomedical information has been found to be one of the reliable approaches and several active compounds have been discovered from plants on the basis of this information (Carney *et al.*, 1999; Fabricant and Farnsworth, 2001; Ajibesin *et al.*, 2008). This knowledge is however dwindling rapidly due to changes towards a more western lifestyle, overexploitation of plant resources, modern agricultural practices,, cultural changes within the community, construction of new small dams, rapid shift towards the allopathic medicine, and the spread of housing colonies and modern education lead to the destruction of not only the habitats of medicinal plants but also vanishing of traditional knowledge and medicinal plant species are threatened day by day in the area.

This survey and lack of information obtained about traditional uses of plants exhibited that rural people in the studied area are not using the plants to treat various diseases. This indicates that the use of traditional plant-based medicine is losing rapidly. People are practicing traditional medicine based on what they currently understand about the system and there is also a possibility that people will use this knowledge in the future even in remote areas. Many plant species have become threatened due to habitat loss as a result of rapid urbanization. During the survey, it was observed that people were hesitant in disclosing their knowledge. It is this knowledge that provides them recognition in the society and hence they do not want to share it. In many cases, it was also found that a bit of this knowledge has been lost during transmission in folklore from one generation to other. The villagers themselves said that, compared to them their forefathers knew much more. Due to recent global shift towards herbal medicines, the pressure on the plant resources in nature have increased and the market is also fast expanding. Therefore, the results of this survey can be incorporated into future conservation management plans for threatened medicinal plants. Further, the local people should participate in problem formulation and decision making process for the conservation strategies.

Acknowledgements

Authors are highly thankful to Indian Council of Medical Research (ICMR), New Delhi, India, for providing financial support and facilities for this research work. We are indebted to the rural community and people of region for sharing their valuable knowledge with us during the course of this study.

References

Ajibesin, K.K.; Ekpo, B.A.; Bala, D.N.; Essien, E.E.; Adesanya, S. A. (2008). Ethnobotanical survey of Akwa Ibom state of Nigeria. *J. Ethnopharmacol.* **115**: 387-408.

Ahmed, M.; Khan, M.A.; Qureshi, R.A. (2003). Ethnobotanical study of some cultivated plants of Chhuchh region (District Attock). *Ham. Med.* **66(3):** 15-19.

Akhtar, M.A.; Rashid, M.; Wahed, M.I.I.; Islam, M.R.; Shaheen, S. M.; Islam, M.A.; Amran, M.S.; Ahmed, M. (2007). Comparison of long-term antihyperglycemic and hypolipidemic effects between *Coccinia cordifolia* (Linn.) and *Catharanthus roseus* (Linn.) in alloxan-induced diabetic rats. *Res. J. Med. Medical Sci.* **2**(1): 29-34.

Asolkar, L.V.; Kakkar, K.K.; Chakre, O.J. (1992). Second Supplement to Glossary of Indian Medicinal Plants with Active Principles. Part I(A-K) (1965-1981), CSIR, New Delhi, India.

Carney, J.R.; Krenisky, J.M.; Williamson, R.T.; Luo, J.; Carlson, T. J.; Hsu, V.L.; Moswa, J.L. (1999). Maprouneacin, a new daphnane diterpenoids with potent antihyperglycaemic activity from *Maprounea africana*. J. Nat. Prod. **62**: 345-347.

Chandel, K.P.S.; Shukla, G.; Sharma, N. (1996). Biodiversity in Medicinal and Aromatic Plants in India: Conservation and Utilization, ICAR–NBPGR Publication, New Delhi, India.

Chevallier, A. (1996). The Encyclopedia of Medicinal Plants. Dorling Kindersley, London.

Dhalwal, K.; Yogesh, S.; Deshpande, A. and Purohit, P. (2007). Evaluation of *in vitro* antioxidant activity of *Sida rhombifolia* (L.) Ssp. *retusa* (L.). *J. Med. Food.* **10(4):** 683-688.

Dominguez, X.A. and Sierra, A. (1970). Isolation of a new diterpene alcohol and parthenin from *Parthenium hysterophorus*. *Plant Med*. **18**: 275-277.

Fabricant, D.S. and Fransworth, N.R. (2001). The value of plants used in traditional medicine for drug discovery. Environmental Health Perspectives (Supplement) **109:** 69-75.

Farnsworth, N.R.; Akerele, O. and Bingel, A.S. (1985). Medicinal Plants in Therapy. *Bulletin of WHO* **63**: 965-981.

Jadhav, D. (2006). Ethnomedicinal plants used by Bhil tribe of Bibdod, Madhya Pradesh. *Indian J. Trad. Know.* **5**(2): 263-267.

Jain, A.; Katewa, S.S.; Choudhary, B.L. and Galav, P. (2004). Folk herbal medicines used in birth control and sexual diseases by tribals of southern Rajasthan, India. *J. Ethnopharmacol.* **90**: 171-177.

Jain, A.; Katewa, S.S.; Galav, P.K. and Sharma, P. (2005). Medicinal plant diversity of Sitamata Wildlife Sanctuary, Rajasthan, India. *J. Ethnopharmacol.* **102:** 143-157.

Jain, S.K. (1967). Ethnobotany: Its Scope and Study. *Indian Museum Bulletin* 2: 39-43.
Jain, S.K. (1991). Dictionary of Indian Folk Medicine and Ethnobotany. Deep Publications. New Delhi, India.

Jeeva, S.; Kiruba, S.; Mishra, B.P.; Venugopal, N.; Das, S.S.M.; Regini, G.S. and Kingston, C. (2006). Weeds of Kanyakumari district and their value in rural life. *Indian J. Trad. Know.* **5**(4): 501-509.

Joshi, P. (1995). Ethnobotany of the Primitive Tribes in Rajasthan. Rupa Books Pvt Ltd. Jaipur, India.

Iwu, M.M. (1993). Handbook of African Medicinal Plants. CRC Press, Florida.

Jayasinghe, U.L.B.; Balasooriya, B.A.I.S.; Bandara, A.G.D. and Fujimoto, Y. (2004). Glycosides from *Grewia damine* and *Filicium dceipiens*. *Nat. Prod. Res.* **18(6):** 499–502.

Katewa, S.S. and Guria, BD. (1997). Ethnobotanical observations on certain wild plants from Southern Aravalli Hills of Rajasthan. *Vasundhara* **2:** 85-86.

Katewa, S.S.; Guria, B.D. and Jain, A. (2001). Ethnomedicinal and obnoxious grasses of Rajasthan, India. *J. Ethnopharmacol.* **76:** 293-297.

Katewa, S.S.; Chaudhary, B.L. and Jain, A. (2004). Folk herbal medicines from tribal area of Rajasthan, India. *J. Ethnopharmacol.* **92:** 41-46.

Khare, C. P. (2004). Indian Herbal Remedies: Rational Western Therapy, Ayurvedic, and other Traditional usage, Botany. Springer, New York.

Kirtikar, K.R. and Basu, B.D. (1984). Indian Medicinal Plants. Lalit Mohan, Allahabad, India.

Klayman, D.L. (1993). *Artemisia annua*: From weed to respectable antimalarial plant. In: Kinghorn, A.D. and Belandrin, M.F. (Eds.). Human Medicinal Agents from Plants. American Chemical Society, pp. 242-255.

Mathabe, M.C.; Nikolova, R.V.; Lall, N. and Nyazema, N.J. (2006). Antibacterial activities of medicinal plants used for the treatment of diarrhoea in Limpopo Province, South Africa. *J. Etnopharmacol.* **105** (**1-2**): 286-293.

Muthu, C.; Ayyanar, M.; Raja, N. and Ignacimuthu, S. (2006). Medicinal plants used by traditional healers in Kancheepuram District of Tamil Nadu, India. *J. Ethnobiol. Ethnomed.* **2:** 43-53.

Nagashayana, N.; Sankarakutty, P.; Nampoothiri, M.R.; Mohan, P.K. and Mohankumar, K.P. (2000). Association of L-DOPA with recovery following Ayurveda medication in Parkinson's disease. *J. Neurological Sci.* 176: 124. Panda, H. (2000). Medicinal Plants, Cultivation & Their uses. National Institute of Industrial Research, New Delhi, India.

Parveen; Upadhyay, B.; Roy, S. and Kumar, A. (2007). Traditional uses of medicinal plants among the rural communities of Churu district in the Thar Desert, India. *J. Ethnopharmacol.* **113**: 387-399.

Prashantkumar, P. and Vidyasagar, G.M. (2006). Documentation of traditional knowledge on medicinal plants of Bidar district, Karnataka. *Indian J. Trad. Know.* **5(3):** 295-299.

Prusti, A.B. and Behera, K.K. (2007). Ethnobotanical exploration of Malkangiri District of Orissa, India. *Ethnobotanical Leaflets* **11**: 122-140.

Ross, I.A. (2003). Medicinal Plants of the World: Chemical Constituents, Traditional and Modern Medicinal uses. Humana Press Inc., Totowa, New Jersey.

Samuelsson, G. (1992). Sesquiterpenes and diterpenes with pharmacological and biological activities. *Acta Pharm. Fennica* **101**: 33-34.

Satyanarayana, L.; Rao, M.N.; Ayyanna, C.; Kumar, S.V. and Satish, D. (2008). Antimicrobial activity of *Rhus mysorensis* (G.) Don root. *Indian J. Ayurveda Pharmaceutical Res.* **1**.

Satyavati, G.V.; Gupta, A.K. and Tondon, N. (1987). Medicinal Plants of India. Vol. 2, CSIR, New Delhi, India.

Sharma, M.P.; Ahmad, J.; Hussain, A. and Khan, S. (1992). Folklore medicinal plants of Mewat (Gurgaon District), Haryana, India. *Int. J. Pharmacog.* **30(2):** 129-134.

Shetty, B.V. and Singh, V. (1987). Flora of India. Series 2: Flora of Rajasthan. Botanical Survey of India, Dehradun, India.

Singh, A.K. (2004). Endangered economic species of Indian desert. *Gen. Resour. Crop Evol.* **51:** 371-380.

Singh, A.K.; Raghubanshi, A.S. and Singh, J.S. (2002). Medical ethnobotany of the tribals of Sonaghati of Sonbhadra district, Uttar Pradesh, India. *J. Ethnopharmacol.* **81**(1): 31-41.

Singh, G.S. (2002). Minor forest products of Sariska National Park: An ethnobotanical profile. In: Trivedi, P.C. (Ed). Ethnobotany. The Diamond Printing Press, Jaipur, India.

Singh, V. and Pandey, R.P. (1998). Ethnobotany of Rajasthan, India. Scientific Publishers. Jodhpur India. Siromoney, G.; Lal, D.G. and Livingstone, C. (1973). Herbal medicines of the Narikoravas. *Folklore* **14**: 363-366.

Soumyanath, A. (2006). Traditional Medicine for Modern Times: Antidiabetic Plants. CRC Press, Boca Raton, FL.

Trivedi, P.C. (2002). Ethnobotany. The Diamond Printing Press, Jaipur, India.

Weniger, B.; Lagnika, L.; Vonthron-Sénécheau, C.; Adjobimey,
T.; Gbenou, J.; Moudachirou, M.; Brun, R.; Anton, R. and Sanni,
A. (2004). Evaluation of ethnobotanically selected Benin medicinal plants for their *in vitro* antiplasmodial activity. *J. Ethnopharmacol.* **90** (2-3): 279-284.

Yadav, A. S. (2005). Supplement to the Flora of North-East Rajasthan from Alwar district. *J. Phytological Res.* **18**(1): 111-114.

Yadav, J.P.; Saini, S.; Kalia, A.N. and Dangi, A.S. (2008). Hypoglycemic and hypolipidemic activity of ethanolic extract of *Salvadora oleoides* in normal and alloxan-induced diabetic rats. *Indian J. Pharmacol.* **40(1)**: 23-27.

| | Table 1: Medicinal plants reported from Sariska National Park by Singh (2002) during the survey done in 1989-1992 | | | | | | | | | |
|--------|---|---------------|-------------------|---|--|--|--|--|--|--|
| S. No. | b. Botanical name Family Vernacular name Ha | | | | | | | | | |
| | | | | | | | | | | |
| 1. | Abrus precatorius L. | Papilionaceae | Chirmthi, ghumchi | C | | | | | | |

| 2. | Acacia catechu Willd. | Mimosaceae | Khair | T |
|-----|---|-----------------|----------------------------|---|
| 3. | Acanthospermum hispidum DC. | Asteraceae | Dokata, kanti | Н |
| 4. | Achyranthes aspera L. | Amaranthaceae | Chirchitta | Н |
| 5. | Aegle marmelos Correa. Bel | Rutaceae | Bel | Т |
| 6. | Arachis hypogaea L. | Papilionaceae | Mungphali | Н |
| 7. | Argemone mexicana L. | Papavaraceae | Kateli, satyanashi | Н |
| 8. | Asparagus racemosus Willd. | Liliaceae | Satawari, satawar | Н |
| 9. | Balanites roxburghii Planch | Simaroubaceae | Hingot | Т |
| 10. | Barleria cristata L. | Acanthaceae | Bajardanti | Н |
| 11. | Barleria prionitis L. | Acanthaceae | Bajardanti | Н |
| 12. | Bauhinia variegata L. | Caesalpiniaceae | Kachnar | Т |
| 13. | Blainvillea latifolia (L.f.) DC. | Asteraceae | Kalajari | Н |
| 14. | Boerhaavia diffusa L. | Nyctaginaceae | Sathi | Н |
| 15. | Butea monosprerma (Lamk.) Taub. | Papilionaceae | Palas, dhak, cheela | Т |
| 16. | Calotropis procera (Ait.) R.Br. | Asclepiadaceae | Aak, akhra | S |
| 17. | Cassia fistula L. | Caesalpiniaceae | Amaltas, karmala | Т |
| 18. | Cayratia carnosa Gagnep. | Vitaceae | Kalitripanni | S |
| 19. | Centella asiatica L. | Umbelliferae | Brahmibuti | Н |
| 20. | Cissampelos pariera L. | Menispermaceae | Heir, jaljamni | S |
| 21. | Cleome gynandra L. | Capparaceae | Hulhul, bagro | Н |
| 22. | Clerodendrum inerme (L.) Gaertn | Verbenaceae | Arni | S |
| 23. | Commelina benghalensis L. | Commelinaceae | Bokhna | Н |
| 24. | C. khurzii Cl. | Commelinaceae | Bokhna | Н |
| 25. | Commiphora wightii (Arn.) Bhandari | Burseraceae | Guggal | S |
| 26. | Crinum defixum Ker-Gawl | Amaryllidaceae | Sukhdarshan | Н |
| 27. | Dioscorea bulbifera L. | Dioscoreaceae | Paharikan, suarkand | С |
| 28. | Elytraria acaulis (L.f.) Engl. | Acanthaceae | Patharchatta | Н |
| 29. | Emblica officinalis Gaertn. | Euphorbiaceae | Amla, awla | Т |
| 30. | Euphorbia hirta L. | Euphorbiaceae | Dudhi bichujari | Н |
| 31. | Ficus carica L. | Moraceae | Anjir | Т |
| 32. | Gardenia florida L. | Rutaceae | Midola | S |
| 33. | Holarrhena antidysenterica (L.) Wall | Apocynaceae | Kero, kutaj, kura | S |
| 34. | Holoptelea integrifolia (Roxb.) Planch | Ulmaceae | Papri, bastedun | Т |
| 35. | Indigofera cordifolia Heyne. ex. Roth | Papilionaceae | Jhajhru, bekar | Н |
| 36. | Leptadaenia pyrotechnica (Forsk.)Decne. | Asclepiadaceae | Khimp | S |
| 37. | Leucas aspera Wild. | Labiatae | Gumma, gomo | Н |
| 38. | Melhania futteyporensis Munro ex Masat. | Stercualiaceae | Basni | S |
| 39. | Momordica dioica Roxb. ex Willd | Cucurbitaceae | Janglikarela, bankarela | C |

| 40. | Mucuna pruriens Baker | Papilionaceae | Kauch, kevach | H |
|-----|--|----------------|-----------------------|---|
| 41. | Ocimum americanum L. | Labiatae | Bantulsi | Н |
| 42. | Ocimum basilicum L. | Labiatae | Dauna, mania | Н |
| 43. | Ocimum sanctum L. | Labiatae | Tulsi | Н |
| 44. | Peritrophe bicalyculata (Retz.) Nee. | Acanthaceae | Nil jhojhru, kakar | Н |
| 45. | Salmalia malabarica (DC) Schot & Endl | Bombacaceae | Semel | Т |
| 46. | Sarcostemma acidum (Roxb.) Voigt | Asclepiadaceae | Khir khimp | S |
| 47. | Sida acuta Burm. f. | Malvaceae | Bal, kharsara | Н |
| 48. | S. cordifolia L. | Malvaceae | Kharenti | Н |
| 49. | Solanum nigrum L. | Solanaceae | Makoi | Н |
| 50. | S. surattense Burm. f. | Solanaceae | Bhurangin, ringni | Н |
| 51. | <i>Terminalia arjuna</i> (Roxb. ex DC.) Wt. & Arn. | Combretaceae | Arjuna | Т |
| 52. | T. bellirica (Gaertn.) Roxb. | Combretaceae | Bahera, desibadam | Т |
| 53. | Tinospora cordifolia (Willd.) Miers | Menispermaceae | Neem gilody | S |
| 54. | Tribulus terrestris L. | Zygophyllaceae | Gokhru | Н |
| 55. | Tridax procumbens L. | Asteraceae | Gorkh-mundi | Н |
| 56. | Wrightia tinctoria R. Br. | Apocynaceae | Khirna, katira, dudhi | Т |
| 57. | Zornia diphylla (L.) Pers | Papilionaceae | Gewani | Н |
| 58. | Zornia gibbosa Span | Papilionaceae | Gewani | Н |

C, Climber; T, Tree; H, Herb; S, Shrub



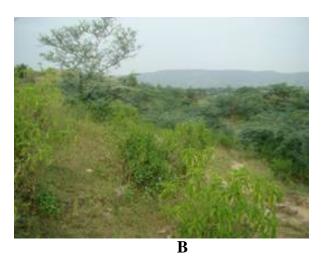




Plate 1: Photographs showing the study regions, conversation with tribals and data collection by author.

| Plant name | Family & Habit | Herbarium number & availability in study area | Common name | Part used | Key ailments | Traditional preparations | References |
|--|----------------------|--|-------------|--------------------|--|---|----------------------|
| 1. Abutilon asiaticum G. Don | Malvaceae (H) | 149 (+) | Kanghi | Rt | Tonic, piles | - | - |
| 2. A. indicum (L.) Sw. | Malvaceae (H) | 8 (+) | Kanghi | Lvs, Bk, Sd, Rt | Fever, laxative | Leaf and root juice are taken orally to treat dental problems | Muthu et al., 2006 |
| 3. <i>Acacia nilotica</i> (L.) Willd. ex Delile | Mimosaceae (T) | 5 (++) | Babul | Gm, Bk | Diorrhoea, dysentery, diabetes | Powder of bark is applied externally in ulcers | Parveen et al., 2007 |
| 4. A. senegal (L.) Willd. | Mimosaceae (T) | 11 (++) | Kumta | Gm | Burns, sore nipples, nodular leprosy | Gum is used internally in inflammation of intestinal mucosa and externally to cover inflamed surfaces as burns, sore nipples and nodular leprosy | Parveen et al., 2007 |
| 5. Acalypha ciliata Forssk. | Euphorbiaceae (H) | 150 (++) | - | Wp, Lvs, Rt | Cuts and wounds, bronchitis, rheumatism | Leaf paste is applied to ulcers | Panda, 2000 |

| 6. A. indica L. | Euphorbiaceae (H) | 154 (+++) | Kho-kali | Lvs, Wp | Bronchitis, pneumonia, asthma, skin disease | Decoction of leaves mixed with common salt is applied to scabies | Parveen et al., 2007 |
|--|---------------------------|---------------|------------|----------------|---|--|----------------------|
| 7. A. lanceolata Willd. | Euphorbiaceae (H) | 156 (+) | - | Lvs, Wp | Antiseptic, vermicide, carminative | Leaf paste is applied externally on boils, sores and swellings | Chandel et al., 1996 |
| 8. Achyranthes aspera L. | Amaranthaceae (H) | 7 (+++) | Latjira | Wp, Rt, Sd | Asthma, fever, cough | One teaspoon powder of whole plant is taken with warm water for pneumonia | Parveen et al., 2007 |
| 9. <i>Actiniopteris radiata</i> (SW.) Link. | Actiniopteridaceae (F) | 164 (+) | Morphanki | Wp | Styptic, anthelmintic | Powdered whole plant along with seed of <i>Ocimum</i> <i>americanum</i> given for Antifertility | Asolkar et al., 1992 |
| 10. Adhatoda zeylanica Medic. | Acanthaceae (S) | 133 (++++) | Adusa | Wp, Lvs, Rt | Fever, jaundice, whooping cough, glandular tumors | Leaf and wood ashes mixed with honey used for cough and asthma; Juice mixed with juice of <i>Feronia limonia</i> cures nose bleeding | Asolkar et al., 1992 |
| Aerva javanica (Burm. f.) Juss. ex Schult. | Amaranthaceae (H) | 10 (++) | Bui | Fl, Sd | Headache, rheumatism | Woolly seeds stuffed in pillows to relieve headache and protective against rheumatism | Parveen et al., 2007 |
| 12. Albizzia lebbeck Benth. | Fabaceae (T) | 166 (+) | Siris | Lvs, Bk, Fl | Boils, eruption, leprous ulcers | Leaf juice is used as eye drops for night blindness | Parveen et al., 2007 |
| 13. Alternanthera pungens Kunth | Amaranthaceae (H) | 167 (+) | Kunth | Wp | Diuretic | Decoction of whole plant is used in gonorrhea | Asolkar et al., 1992 |
| 14. Alysicarpus vaginalis DC. | Fabaceae (H) | 168 (+) | Bela | Rt | Cough | Roots for treatment of irregular menses | Asolkar et al., 1992 |
| 15. Anisomeles indica (L.) Kuntze | Lamiaceae (H) | 14 (++) | Rantil | Wp, Sd oil | Carminative, tonic, uterine affections | Crushed leaves applied to neck of bullock to cure inflammation caused by cart pulling | Asolkar et al., 1992 |
| 16. Anogeissus pendula Edgew. | Combretaceae (T) | 169 (+) | Dhaunkra | Ар | Diuretic, cardiovascular | Decoction of bark is given for gastric disorder | Jain et al., 2005 |
| 17. Apluda mutica L. | Poaceae (G) | 170 (+) | Tamtabheda | Wp | Skin-diseases | Poultice of whole plant is used to cure mouth sores of cattle | Katewa et al., 2001 |
| 18. Argemone mexicana L. | Papaveraceae (H) | 135 (++) | Pilikateli | Lvs, rt, Sd | Skin diseases, cutaneous affections, snake-bite | Seeds are poured in 'Mahua oil' and are applied to eczema and itching | Parveen et al., 2007 |

| 19. Barleria prionitis L. | Acanthaceae (H) | 138 (++) | Bajardanti | Lvs, Rt, Bk | Cough, toothache | Twigs as toothbrush; Decoction of whole plant as health tonic ; Leaves to relieve pain | Singh, 2004 |
|--|------------------------|---------------|------------------|---------------------------|--|--|-----------------------|
| 20. Bidens biternata (Lour.) Merr. & Sherrif. | Asteraceae (H) | 171 (+) | Chirchitta | Wp, Lvs, Rt, Fl, Sd | Leprosy, skin diseases, tumors, anthelmintic | Juice of leaves applied to heal ulcers and to cure eye and ear complaints | Asolkar et al., 1992 |
| 21. Blainvillea acmella (L.) Philipson | Asteraceae (H) | 172 (+) | - | - | - | - | - |
| 22. Boerhavia diffusa L. | Nyctaginaceae (H) | 19 (+++) | Punarnava | Rt | Asthma | Leaves boiled with rice, garlic and water are rubbed on body for rheumatism | Parveen et al., 2007 |
| 23. Borreria articularis (L. f.) F. N. Williams | Rubiaceae (H) | 17 (++) | Bagrakote jungle | Sd, Rt | Earache, blindness, dysentery, stimulant, kill tooth-worms | Crushed leaves used in stomach pain | Asolkar et al., 1992 |
| 24. B. stricta auct. | Rubiaceae (H) | 173 (+) | - | - | - | - | - |
| 25. Butea monosperma (Lamk.) Taub. | Fabaceae (T) | 139 (++++) | Dhak | St, Bk, Fl, Gm, Lvs | Anthelmintic, astringent, dysentery, leucorrhoea | Stem paste is applied on the affected parts for cuts and wounds; Bark paste is applied locally on the affected portion of body | Katewa et al., 2004 |
| 26. <i>Calotropis procera</i> (Ait.) Ait. f. | Asclepiadaceae (S) | 38 (+++) | Aakada | Rt, Lvs, Fl, Lt, Bk | Dysentry, cough, asthma | Decoction of root bark along with black pepper is used twice a day for 3 day for malarial fever | Parveen et al., 2007 |
| 27. Cardiospermum halicacabum L. | Sapindaceae (C) | 174 (+) | Kanphuti | Wp, Rt, Lvs | Rheumatism, laxative, nervous diseases, earache | Powdered leaves used externally for healing wounds | Asolkar et al., 1992 |
| 28. Carissa carandas L. | Apocynaceae (T) | 143 (+) | Karunda | Lvs, Rt, Ft | Insect repellent, hypotensive dropsy, anasarca madness | Paste of root bark useful in diabetic ulcer | Asolkar et al., 1992 |
| 29. Cassia alata L. | Caesalpiniaceae (S) | 175 (++) | Datkapat | Lvs, Bk | Diuretic, insect repellant, laxative, anti- inflammatory | Leaves decoction is used for skin-diseases | Ajibesin et al., 2008 |
| 30. <i>C. tora</i> L. | Caesalpiniaceae (H) | 140 (+++) | Chakunda | Lvs, Sd | Laxative, skin-disease, ring-worm | Powdered leaves boiled in water to make decoction and externally used for skin- diseases | Ajibesin et al., 2008 |

| 31. Cayratia carnosa (Wall.)Gagnep.ex Wight | Vitaceae (S) | 176 (+) | Amar-bel | Ap, Rt | Depressant | Root given in anaemic conditions | Asolkar et al., 1992 |
|---|-----------------------|-------------|---------------|----------------|--|---|----------------------------|
| 32. Celosia argentea L. | Amaranthaceae (H) | 177 (+) | Sufaid murgha | Sd | Mouth sores, eye diseases, diarrhoea | 20 g crushed seeds is taken orally for ovarian and uterus diseases | Katewa et al., 2004 |
| 33. Citrullus colocynthis (L.) Schrad. | Cucurbitaceae (H) | 28 (+) | Indrayan | Rt, Ft | Purgative, jaundice, rheumatism | Root paste and Ashgandh mixed with honey is administered orally for rheumatism | Parveen et al., 2007 |
| 34. Cleome viscosa L. | Capparaceae (H) | 178 (++) | Hulhul | Wp, Lvs | Headache, boils | Leaf paste is applied topically to heal wounds | Muthu et al., 2006 |
| 35. Coccinia cordifolia Cogn. | Cucurbitaceae (H) | 179 (+) | Kanduri | Lvs, Rt | Skin-eruption | Juice of rots and leaves is used to treat diabetes | Akhtar et al., 2007 |
| 36. Cocculus hirsutus (L.) Diels | Menispermaceae (C) | 180 (+) | Jamti-ki-bel | Lvs, Rt, St | Fever, rheumatism, cooling, laxative | Powdered leaves mixed with water and applied to eyes giving cooling effect | Asolkar et al., 1992 |
| 37. Commelina forskali L. | Commelinaceae (H) | 33 (+++) | - | - | - | - | - |
| 38. Corchorus aestuans L. | Tiliaceae (H) | 181 (++) | - | Wp, Sd | Anticancer, cardiotonic | Paste of seeds is given with warm cow milk to relieve congestion in chest | Prusti and Behera, 2007 |
| 39. Crotalaria medicaginea Lam. | Fabaceae (H) | 32 (+++) | Gulabi | Wp, Sd | Scabies, impetigo | Seed decoction is given toxaemia | Trivedi, 2002 |
| 40. Croton bonplandianum Baill. | Euphorbiaceae (H) | 46 (++) | Ban-tulsi | Wp, Lvs, Lt | Itch, scabies | Latex used to heal cuts and wounds | Asolkar et al., 1992 |
| 41. Datura fastuosa L. | Solanaceae (S) | 54 (+++) | Datura | Wp, Lvs, Sd | Insanity, fever, cerebral complications, skin- diseases, swellings | Leaves smoked to cure cough | Asolkar et al., 1992 |
| 42. Digera muricata (L.) Mart | Amaranthaceae (H) | 52 (++) | Latmahuria | Lvs | Laxative, urinary discharges, boils | Leaf paste is applied locally to prevent the pus formation | Katewa et al., 2004 |
| 43. Dipteracanthus prostratus (Poir.) Nees | Acanthaceae (H) | 49 (++) | Kalighavani | Wp, Fl | Hypoglycaemic, anticancer, ear-diseases | Plant decoction is used as ear maladies | Chandel et al., 1996 |
| 44. Eucalyptus camaldulensis Dehnh. | Myrtaceae (T) | 57 (+++) | Safeda | Lvs, oil | Antibacterial, cuts, skin- diseases, diarrhoea | Leaf essential oil can be gargled for sore throat | Chevallier, 1996 |

| 45. Euphorbia caducifolia Haines | Euphorbiaceae (T) | 157 (++) | Dandathor | Lt, rt | Cough, skin-blisters | Root decoction is used as effective abortifacient at initial stages | Ross, 2003 |
|--|----------------------|-------------|---------------|----------------|--|---|----------------------------|
| 46. E. hirta L. | Euphorbiaceae (H) | 58 (++) | Dudhi | Wp, Lt | Cough, ring-worm, injury | About 20 leaves are crushed and the extract is given orally with honey once a day in the morning for leucorrhoea | Parveen et al., 2007 |
| 47. E. thymifolia L. | Euphorbiaceae (H) | 182 (+) | Choti-dudhi | Lvs, Sd | Laxative, bowel complaints | Extract of whole plant to cure small pox | Jadhav, 2006 |
| 48. Ficus carica L. | Moraceae (T) | 183 (+) | Anjir | Wp, Ft, Lt | Laxative, anticancer, anaemia, anthelmintic | Exudates are applied externally on ringworm thrice daily | Trivedi, 2002 |
| 49. Gisekia pharnaceoides L. | Aizoaceae (H) | 64 (+) | Balu ka sag | Wp | Female diseases, defective semen, destroys fat, malfunctioning of sex organs | Plant extract to kill roundworms | Singh, 2004 |
| 50. Gloriosa superba L. | Liliaceae (H) | 188 (+) | Kalihari | Tbs, Rt | Gonorrhoea, snake-bite | Paste of dried tuber powder is applied locally for wounds | Katewa et al., 2004 |
| 51. Gomphrena celosioides Mart. | Amaranthaceae (H) | 65 (++) | - | Lvs | Diuretic | Leaf paste is used to treat malaria | Weniger et al., 2004 |
| 52. Grewia damine Gaertn. | Tiliaceae (S) | 184 (+) | - | Wd | Cough | Whole plant is used to treat diarrhea and dysentery | Jayasinghe et al., 2004 |
| 53. G. flavescens A. Juss. | Tiliaceae (S) | 185 (+) | Kali-siali | Lvs, Rt, Ft | Increase male strength | Rot powder and decoction is used for bleeding of urinary tract, leucorrhoea, spermatorrhoea | Jain et al., 2005 |
| 54. G. tenax (Forssk.) Fiori | Tiliaceae (S) | 186 (+) | Gango | Rt, St | Antitumor, skin-diseases | Decoction of bark for cough and muscular pain | Singh, 2004 |
| 55. Heliotropium marifolium Koen. ex Retz. | Boraginaceae (H) | 69 (+) | Choti-santri | Wp | Emetic, ulcer, snake-bite | - | - |
| 56. <i>Hibiscus lobatus</i> (Murray) Kuntze | Malvaceae (S) | 187 (+) | - | Wp | Debility, spermatorrhoea | - | - |
| 57. H. micranthus L. f. | Malvaceae (S) | 68 (++) | Chanak bhindo | Wp, Lvs, St | Febrifuge | - | - |

| 58. Indigofera linnaei Ali. | Fabaceae (H) | 72 (+++) | Latahai | Wp, Rt | Diuretic, antiscorbutic | Plant decoction is used in epilepsy and insanity ; Plant boild in oil is applied on burns ; Juice of plant is used as an alternative, diuretic and in venereal affections | Satyavati et al., 1987 |
|---|-------------------------|--------------|----------|--------------------|--|--|----------------------------|
| 59. I. tinctoria <u>L.</u> | Fabaceae (H) | 189 (++) | - | Ap, Lvs, Rt | Anti-hepatotoxic, hypoglycaemic | Root paste is given in fever | Asolkar et al., 1992 |
| 60. <i>Ipomoea carnea</i> Jacq. | Convolvulaceae (S) | 163 (+++) | Beshram | Lvs, St, Ft, Sd | Skin-diseases, leucoderma, muscle relaxant | Paste of a single seed is given in filaria | Prusti and Behera, 2007 |
| 61. <i>I. dichroa</i> (Roem. & Schult) Choisy | Convolvulaceae (S) | 191 (+) | - | Sd | Purgatve, fever | - | - |
| 62. I. eriocarpa R. Br. | Convolvulaceae (S) | 190 (+) | Hara | Lvs, Sd oil | Skin-diseases, arthritis, rheumatism | Plant paste is externally applied to treat rheumatism and leprosy | Singh et al., 2002 |
| 63. I. pes-tigridis L. | Convolvulaceae (H) | 71 (+++) | Kamalata | Wp, Lvs, Rt | Dog-bite, purgative, boils | Plant paste is locally applied to treat carbuncles and boils | Singh et al., 2002 |
| 64. I. turbinata Lag. | Convolvulaceae (C) | 192 (+) | Balkauri | Lvs, St, Sd | Skin-diseases, cuts, laxative | Plant juice used as an insecticide and laxative | Chandel et al., 1996 |
| 65. Lantana camara L. | Verbenaceae (S) | 81 (+++) | Jharmari | Wp | Tetanus, tonic, rheumatism, malaria | About half cup of plant decoction with a little quantity of 'kala namak' is taken twice a day till relief tetanus | Parveen et al., 2007 |
| 66. <i>Leucas cephalotes</i> (Roth) Spreng. | Lamiaceae (H) | 193 (+) | Goma | Wp, Fl | Scabies, cough, cold, scorpion-sting | Plant decoction is used for malaria, headache, eye complaints | Satyavati et al., 1987 |
| 67. L. urticaefolia (Vahl.) R. Br. | Lamiaceae (H) | 194 (+) | Panihari | Lvs | Fever | Boiled leaves mixed with jaggery are given to cows and buffaloes to expel placenta after delivery | Sharma et al., 1992 |
| 68. <i>Lindenbergia muraria</i> (Roxb.) Brühl | Scrophulariaceae (H) | 77 (+) | Chatti | Wp, Lvs | Fever, skin-infection | Paste of leaf is applied on snake-bite and scorpion-sting | Trivedi, 2002 |
| 69. Lycium barbarum L. | Solanaceae (S) | 195 (+) | Morali | Wp | - | Fresh plant decoction is used as diuretic; Stem bark against bronchitis for horses | Singh, 2004 |
| 70. Martynia annua L. | Martyniaceae (H) | 84 (+) | Bichu | Wp, Lvs, Ft | Sore throat, epilepsy, tuberculosis-glands | Paste of nut is considered to have beneficial effect when applied to the bites of venomous insects | Satyavati et al., 1987 |

| 71. Melhania hamiltoniana Wall. | Sterculiaceae (H) | 204 (+) | - | - | - | - | - |
|--|-----------------------|--------------|---------------|----------------------------|---|---|-------------------------------|
| 72. <i>Mollugo nudicaulis</i> Lamk. | Mollugoniaceae (H) | 87 (+) | - | Wp, Lvs | Bitter, whooping cough | Leaves are macerated in water to which some lime juice has been added and drunk as a warm-expeller | Iwu, 1993 |
| 73. <i>Momordica dioica</i> Roxb. ex Willd. | Cucurbitaceae (C) | 160 (+) | Kakoda | Ft, sd, Tb | Elephantiasis, anthelmintic, jaundice | Root paste is applied on snake- bites for three times daily | Trivedi, 2002 |
| 74. Nerium oleander L. | Apocynaceae (S) | 88 (+) | Kaner | Wp, Lvs, Rt, Bk, Oil | Leprosy, skin-disease, poisonous, chanceres and ulcers of the penis | Root paste with water and are applied externally chancre, ulcers and leprosy | Parveen et al., 2007 |
| 75. Ocimum canum Sims. | Labiatae (H) | 90 (+++) | Kali-tulsi | Wp, Lvs | Skin-disorder, cold, carminative, dysentery | Leaf paste is used in parasitical diseases of the skin and also applied to the finger and toe nails during fever when extremities of cold | Satyavati et al., 1987 |
| 76. Parthenium hysterophorus L. | Asteraceae (H) | 95 (++) | Gajar ghas | Rt, St | Tonic, febrifuge, rheumatism | Plant decoction is externally used for skin-diseases | Dominguez and Sierra, 1970 |
| 77. Pedalium murex L. | Pedaliaceae (H) | 94 (++) | Bara gokhru | Wp, Lvs, Rt, St, Fl | Antiseptic, aphrodisiac, leucorrhoea | Mucilaginous infusion of the fruit is given in incontinence of urine, spermatorrhoea, nocturnal emission and impotence | Satyavati et al., 1987 |
| 78. Pergularia daemia (Forsk.) Chiov. | Asclepiadaceae (H) | 105 (++) | Sagovani | | Gastric ulcer, emetic, anthelmintic | Leaf decoction is an utrine tonic and is taken orally up to 20 ml per day | Singh et al., 2002 |
| 79. Peristrophe paniculata (Forsk.) Brummitt | Acanthaceae (H) | 145 (++) | Atrilal | Wp | Snake-poison | Whole plant macerated in an infusion of rice, is taken orally in a large quantity as an antidote to snake-poison | Singh et al., 2002 |
| 80. Portulaca suffruticosa Wt. | Portulacaceae (H) | 102 (+) | Khurfa | Lvs, St | Fever, polydipsia, headache | Fresh juice of plant for burning micturation | - |
| 81. <i>Phyllanthus nirurii</i> Sensu Hook. f. | Euphorbiaceae (H) | 196 (+) | Bhuian anvala | Wp, Rt, Shoot | Diuretic, jaundice, dysentry | Leaves mixed with salt applied locally to skin affections | Parveen et al., 2007 |
| 82. Physalis minima L. | Solanaceae (H) | 197 (+) | Pipat | Wp | Tonic, purgative, joint pain | Fruit eaten and leaf juice used in earache | Singh, 2004 |
| 83. Prosopis cineraria (L.) Druce | Mimosaceae (T) | 159 (+++) | Khejari | Fl, Infl | Boils, skin-diseases | Flowers are pounded, mixed with sugar and eaten by women during pregnancy as a safe guard against miscarriage | Parveen et al., 2007 |

| 84. Pupalia lappacea (L.) Juss. | Amaranthaceae (H) | 91 (++) | - | Wp | Antidote, dropsy, oedema, febrifuge | - | - |
|--|----------------------|---------------|-------------|---------------------------|--|---|-------------------------------|
| 85. Rhynchosia minima (L.) DC. | Fabaceae (H) | 107 (+) | Govindpalli | Lvs | Abortifacient | Seeds are roasted dehusked and used as pulses | Prusti and Behera, 2007 |
| 86. <i>Rhus mysorensis</i> Heyne ex Wight & Arn. | Anacardiaceae (T) | 146 (+) | Dansara | | Diarrhoea | Fruits for digestion | Satyanarayana et al., 2008 |
| 87. Ricinus communis L. | Euphorbiaceae (S) | 38 (++) | Arandi | Lvs, Sd | Boil, carbuncle, rheumatism | Leaf infusion is used stomachache | Parveen et al., 2007 |
| 88. <i>Salvadora oleoides</i> Dcne. and Clarke | Salvadoraceae (S) | 198 (+) | Kharojhal | Lvs, Ft | Antiinflammatory, analgesic, antiulcer | Leaf paste is used to cure cough and treatment of enlarged spleen and fever | Yadav et al., 2008 |
| 89. Sesamum indicum L. | Pedaliaceae (H) | 200 (+) | Til | Lvs, Sd | Polyuria, pimples, ophthalmia | Decoction of the seeds with acorus, 'pippali' and 'gur' is given in amenorrhea | Parveen et al., 2007 |
| 90. <i>Setaria verticillata</i> (L.) P. Beauv. | Poaceae (G) | 199 (+) | - | - | - | - | - |
| 91. <i>Sida acuta</i> Burm. | Malvaceae (H) | 112 (++++) | Bala | Wp, Lvs, Rt | Astringent, cut and wounds, diorrhoea | Leaf paste is applied topically to heal cuts, wounds and to get relief from headache | Muthu et al., 2006 |
| 92. S. cordifolia L. | Malvaceae (H) | 109 (++) | Kungyi | Wp, Lvs, Rt, Sd | Aphrodisiac, snake-bite, gonorrhoea | Rot with cow's milk showed improvement in Parkinson patients | Nagashayana et al., 2000 |
| 93. S. rhombifolia L. | Malvaceae (H) | 151 (+++) | Atibala | Rt, St, Lvs, Wp | Swelling, rheumatism, tuberculosis | Root infusion for the treatment of rheumatism and neurological complaints | Dhalwal et al., 2007 |
| 94. S. veronicaefolia Lam. | Malvaceae (H) | 201 (+) | Bhiunli | Wp | Astringent, bitter, leucorrhoea, gonorrhoea | Leaves ground into a paste and applied for thorn poison | Siromoney et al., 1973 |
| 95. Solanum nigrum L. | Solanaceae (H) | 113 (+) | Makoi | Wp, Lvs, Rt | Psoriasis, piles, dysentry | Roots with small amount of sugar are boiled in water and are given to women to enhancing fertility | Parveen et al., 2007 |
| 96. S. virginianum L. | Solanaceae (H) | 108 (++) | Pili kateli | Rt, St, Fl, Ft | Cough, asthma, gonorrhoea | Decoction of plant with <i>Tinospora cordifolia, Zingiber</i> <i>officinale</i> , added with the powder of <i>Piper longum</i> was used for cough, asthma, anorexia, fever and indigestion | Khare, 2004 |
| 97. Tephrosia purpurea (L.) Pers. | Fabaceae (H) | 122 (++) | Sarphonka | Wp, Rt | Blood purifier, tonic, colic, pain, tonsilitis | Decoction of the rots with ginger is comsumed to relieve headache | Parveen et al., 2007 |
| 98. T. uniflora Pers. | Fabaceae (H) | 202 (+) | Bhaker | Wp, Lvs, Rt, Sd, Bk | Poisonous bites, diuretic, asthma, piles, syphilis | Whole plant is boiled in water and eaten for syphilis | Singh, 2004 |

| 99. Thevetia peruviana (Pers.) K. Schum | Apocynaceae (S) | 123 (+) | Pila-kaner | Bk | Fever, psoriasis, skin- infection | A weak decoction of stem bark is used to treat intermittent fevers | Iwu, 1993 |
|--|-----------------------|---------------|------------------|----------------------------------|--|--|---------------------------------------|
| 100. Trianthema portulacastrum L. | Aizoaceae (H) | 120 (++) | Lal-sabuni | Lvs, Rt | Amenorrhoea | Decoction of root is taken internally to treat constipation and asthma | Muthu et al., 2006 |
| 101. Tribulus terrestris L. | Zygophyllaceae (H) | 119 (+++) | Gokhru | Wp, St, Ft | Urinary trouble, kidney stones, gonorrhoea | Powdered fruits in doses of 18 g with sugar and black pepper for spermatorrhoea | Parveen et al., 2007 |
| 102. Trichosanthes cucumerina L. | Cucurbitaceae (H) | 203 (+) | Jangli-chichonda | Wp, Lvs, St, Ft, Sd, Rt | Cardiac tonic, skin- disseases | Decoction of root is used for bronchitis and heart diseases | Jain et al., 2005 |
| 103. Tridex procumbens L. | Asteraceae (H) | 117 (++) | Molyamehndi | Lvs | Kidney stones, boils, blisters, dysentery | Leaf paste is applied topically on cuts and wounds | Muthu et al., 2006 |
| 104. Triumfetta rhomboidea Jacq. | Tiliaceae (S) | 116 (++++) | Bhurat | Wp, Rt | Jaundice, diarrhoea | Root extract is taken to cure urinogenital problem of male | Jadhav, 2006 |
| 105. Verbesina encelioides (Cav.) Benth. & Hook. f. ex Gray | Asteraceae (H) | 126 (+++) | Nakli-Surajmukhi | Wp | Febrifuge, emetic, insecticide, anti- inflammatory | Infusion of whole plant for reduce swelling | Soumyanath, 2006 |
| 106. Vernonia cinerea (L.) Less. | Asteraceae (H) | 25 (++) | Sahadevi | Wp, Lvs | Diaphoretic, piles, dropsy, conjunctivitis | Leaf decoction is given in fever | Jeeva et al., 2006 |
| 107. Vitex negundo L. | Verbenaceae (T) | 124 (+) | Nirgundi | Lvs, Rt | Tonic, rheumatism, ulcers | Fresh leaves crushed along with salt and the extract is taken internally once a day for 7 days in night blindness | Prashantkumar and Vidyasagar, 2006 |
| 108. Waltheria indica L. | Sterculiaceae (H) | 127 (+) | Nallabenda | Wp | Emollient, cough, cold | Decoction of whole plant for treatment of diarrhoea | Mathabe et al., 2006 |
| 109. Xanthium strumarium L. | Asteraceae (H) | 155 (+++) | Bilawa | Sd | Febrifuge, skin- diseases, eczema, scabies, rheumatism | Fruit is considered cooling and effectious in the small pox and also useful in urinary diseases | Ahmad, 2003 |
| 110. Zizyphus nummularia (Burm. f.) W. & A | Rhamnaceae (S) | 129 (++) | Boerjadi | Lvs, Ft | Cooling, scabies | Juice of the root bark is applied externally in rheumatism | Parveen et al., 2007 |