



Ethnomedicinal Plants Used For Inflammation and Swelling In Mahur Range Forest of Nanded District, Maharashtra, India.

P.R. KANTHALE

*Department of Botany, Nutan Mahavidyalaya, Selu
Dist. Parbhani, Maharashtra, India, Pin-431503*

ABSTRACT

The present research work was undertaken to study the ethnomedicinal practices of some medicinal plants used to cure Inflammation and swelling in Mahur range forest of Nanded district. During survey 24 flowering plants belonging to 20 families were collected and identified. Venders, local herbalists and tribals use these medicinal plant in the treatment of Inflammation and swelling. The medicinal information was collected through semi-structured interviews. It was pointed out that rhizome, root, leaves, stem bark, young shoot, seeds and stem latex are commonly used in the preparation medicines in the form of paste, powder and juice.

Key Words: Ethnomedicinal Plants, Tribals, Inflammation, swelling, Mahur forest, Maharashtra.

Introduction

Now a day medicinal plants used by people for the treatment of diseases. Venders, local herbalists and tribals in Mahur range forest use medicinal plants for the treatment of Inflammation and swelling. Drugs prepared from herbs are used for the treatment of several diseases(Kataria and Kaur,2013). The plants are of the most important source of medicines (Mohini, et.al., 2012). In Mahur range forest swelling is common caused due to insect bite, injury, rashes inflection and heavy work. The common symptoms of external swelling are local heat, pain and fever. The main symptoms of inflammation are pain, swelling, redness, local heat, joint pain joint swelling and muscle pain. The process of inflammation is characterized by redness and heat pain (Banik et.al., 2020)The swelling and inflammation are common in people suffering from arthritis and rheumatism in study area.

Material and Methods

The tribal population of Mahur consists of *Andh, Kolam, Gond, Naikede* and *Pradhan* (Pawade *et al.*, 2008). From this region ethnobotanical data was collected during 2006-2010. The information was gathered through semi structured interviews of knowledgeable elders between the age group of 45 to 65years.During the course of the study Each informant was visited three times in order to verify reliability of the obtained data. The collected plants were identified with help of standard floras (Naik, 1979; Naiket *al.*, 1998) and Yadav and

Sirdesai (2002). The plants were enumerated alphabetically along with botanical name, family, Local name, Part used and uses

ENUMERATION

The plants were enumerated alphabetically along with botanical name, family, Part(s) used and vernacular name.

1. *Aerva lanata* Juss.

Family: Amaranthaceae. **Local Name:** Kalrani. **Part(s) used:** Leaves.

Ethnobotanical Uses:

Paste of leaves is applied on swelled area to reduce swelling (Gite).

2. *Blepharis repens* (Vahl.) Roth

Family: Acanthaceae. **Local Name:** Hadsan. **Part(s) used:** Entire plant.

Ethnobotanical Uses:

Two spoonful powder of plant is consumed along with cow milk to cure bone inflammation (Doheli).

3. *Cassine albens* (Retz.) Kosterm.

Family: Celastraceae. **Local Name:** Bhuta palas or Bhoott keshi. **Part(s) used:** Leaves.

Ethnobotanical Uses:

Paste of stem bark is applied on inflammatory area as an antiphlogistic (Perchake).

4. *Curcuma pseudomontana* Grah.

Family: Zingiberaceae. **Local Name:** Ranhalad. **Part(s) used:** Rhizome.

Ethnobotanical Uses:

Paste of fresh rhizome is mixed with moist soil and is applied on inflammatory area as a antiphlogistic (Gangaram).

5. *Crotalaria hirsuta* Willd.

Family: Fabaceae, **Local Name:** Sonari, **Part(s) used:** Leaves.

Ethnobotanical Uses

Paste of leaves is applied over inflammatory area two times in a day for three days to cure inflammation (Gangaram).

6. *Commelina paludosa* Blume.

Family: Commelinaceae. **Local Name:** Pangavat. **Part(s) used:** Leaves.

Ethnobotanical Uses:

Paste of leaves is applied on inflammatory area and then coconut oil is applied to cure inflammation (Perchake, Gangaram, Baliram Rathod).

7. *Cyperus alopecuroides* Rottb.

Family: Cyperaceae. **Local Name:** Songavat. **Part(s) used:** Rhizome.

Ethnobotanical Uses:

Paste of rhizome is applied over inflammatory area to cure inflammation (Gangaram).

8. *Cynodon dactylon* (L.) Pers.

Family: Poaceae. **Local Name:** Harali. **Part(s) used:** plant.

Ethnobotanical Uses:

Paste of plant is applied on swelled part (Pawar).

9. *Datura metel* L.

Family: Solanaceae. **Local Name:** Kala dhotra. **Part(s) used:** leaves and fruit.

Ethnobotanical Uses:

Juice or paste of leaves is applied on inflammatory area twice a day for three days as an antiphlogistic (Chavan and Pawar).

10. *Diplocyclos palmatus* (L.) Jeffrey

Family: Cucurbitaceae. **Local Name:** Shivlingi. **Part(s) used:** Fruit and root.

Ethnobotanical Uses:

Paste of root is applied on swelling till cure (Gangaram).

11. *Eclipta alba* (L.) Hassk.

Family: Asteraceae. **Local Name:** Maka. **Part(s) used:** Leaves.

Ethnobotanical Uses:

1. Two drops of juice of leaves are dropped in eyes twice a day for two day to reduce of eye swelling (Gangaram).

2. Paste of leaves is applied on inflammatory area to cure inflammation (Ubale).

12. *Euphorbia dracunculoides* Lamk.

Family: Euphorbiaceae. **Local Name:** Pisola. **Part(s) used:** Entire plant.

Ethnobotanical Uses:

Paste of plant is applied over inflammatory area to control inflammation (Baliram Rathod).

13. *Euphorbia barnhartii* Croizat, Euph.

Family: Euphorbiaceae. **Local Name:** Tindhari nivdung. **Part(s) used:** Plant latex and tender shoots.

Ethnobotanical Uses:

Latex of plant is used to cure swelling (Mantute).

14. *Ficus racemosa* L.

Family: Moraceae. **Local Name:** Umbar. **Part(s) used:** Root, stem latex and fruit.

Ethnobotanical Uses:

Latex is applied on testis twice a day for three days to control swelling of testis (Dumane).

15. *Gnaphalium polycaulon* Pers.

Family: Asteraceae. **Local Name:** Ran pather. **Part(s) used:** Leaves.

Ethnobotanical Uses:

Paste of leaves is applied on swelled part till cure (Rathod).

16. *Ipomoea pes-tigridis* L.

Family: Convolvulaceae. **Local Name:** Beshramwel. **Part(s) used:** Leaves.

Ethnobotanical Uses:

Paste of leaves is applied over swelled area to reduce swelling (Gangaram).

17. *Opuntia elatior* Mill.

Family: Cactaceae. **Local Name:** Phady nivdung. **Part(s) used:** Young stem and fruit.

Ethnobotanical Uses:

Paste of warmed young shoot is applied on inflammatory area (Kadam).

18. *Pongamia pinnata* (L.) Pierre

Family: Fabaceae. **Local Name:** Karangi. **Part(s) used:** Leaves and seeds.

Ethnobotanical Uses:

Paste of seed is locally applied on swelled part (Gangaram).

19. *Prosopis cineraria* (L.) Druce

Family: Mimosaceae. **Local Name:** Sondad. **Part(s) used:** Leaves.

Ethnobotanical Uses:

Paste of leaves is applied on inflammatory area to cure inflammation (Gangaram).

20. *Portulaca oleracea* L.

Family: Portulacaceae. **Local Name:** Ghol. **Part(s) used:** Entire plant.

Ethnobotanical Uses:

Paste of plant is applied on inflammatory area thrice a day for three days (Rathod).

21. *Spermacoce articularis* L.f.

Family: Rubiaceae. **Local Name:** Madan ghanti. **Part(s) used:** Leaves.

Ethnobotanical Uses:

Paste of leaves is applied over inflammatory area to cure inflammation (Ubale).

22. *Santalum album* L.

Family: Santalaceae. **Local Name:** Chandan. **Part(s) used:** Stem bark.

Ethnobotanical Uses:

Paste of stem is applied on swelled area to reduce pain (Gite)

23. *Trigonella foenum-graecum* L.

Family: Fabaceae. **Local Name:** Methi. **Part(s) used:** Seed and leaves.

Ethnobotanical Uses:

Paste of leaves is used as antiphlogistic or applied on inflammatory area (Gangaram).

24. *Vitex negundo* L.

Family: Verbenaceae. **Local Name:** Nirgudi. **Part(s) used:** Leaves.

Paste of warmed leaves is applied on inflammatory area till cure (Gangaram).

Discussion

During survey information collected from men of different age (45-65). All informants are rich in ethnomedicinal knowledge. Even today in most of rural areas people are depending on herbal drug system for primary health care (Shende, 2018). People of this area use allopathic and herbal medicine but allopathic medicine are more expensive due to that reason peoples use medicinal plant for the treatment of Inflammation and swelling. The data revealed that 24 medicinal plants belongs to 20 family were used by Venders, local herbalists and tribals for the treatment of Inflammation and swelling. 15 plants are used in the treatment of

Inflammation and 9 plants are used in the treatment of swelling. Due to less side effects peoples in developed countries are used traditional system for the treatment of diseases (Alamgeer, et.al., 2018).The various plants parts are used in the preparation of medicine are root, rhizome, leaves, stem bark, seed and latex. The drugs are prepared in the form of powder, paste and juice.

Acknowledgements

The author is grateful to all those informers who shared their knowledge about medicinal plants during survey. Author is thankful to Dr. V.K. Kothekar, Ex-Principal, Nutan Mahavidyalaya, Sailu, Dr. S.D. Biradar, Ex-HOD, Department of Botany D.S.M. College parbhani and Dr. U. C. Rathod, Principal, Nutan Mahavidyalaya, Sailu for their constant inspiration.

References

1. Alamgeer, WaqasYounis, HiraAsif, Amber Sharif, HumayunRiaz, Ishfaq Ali Bukhari and Asaad Mohamed Assiri.Traditional medicinal plants used for respiratory disorders in Pakistan: a review of the ethno-medicinal and pharmacological evidence, *Chin Med*,2018: 13:48.
2. Bapan Banik, Sanjoy Das and Malay Kumar Das. Medicinal Plants with Potent Anti-inflammatory and Anti-arthritis Properties found in Eastern Parts of the Himalaya: An Ethnomedicinal Review, *Pharmacogn Rev*, 2020;14(28):pp121-137.
3. J. J. Shende and L. P. Dalal.Ethnomedicinal Treatment of Cough and Asthma in the Rural Area of Wardha District (M.S.). *International Journal of Science and Research (IJSR)*, 2019;8(3):pp777-782.
4. Mohini A. Phanse, Manohar J. Patil, Konde Abbulu, Pravin D. Chaudhari and Bhoomi Patel. *In-vivo* and *in-vitro* screening of medicinal plants for their anti-inflammatory activity: an overview, *Journal of Applied Pharmaceutical Science*, 2012; 2(07): pp19-33
5. Naik V. N. “ *Flora of Osmanabad* “, Venus Publishers, Aurangabad, 1979.
6. Naik V. N. “ *Flora of Marathwada* “, AmrutPrakashan, Aurangabad, Vol I &II, 1998.
7. Pawde, B. B., Bhise, V. B and Takle,S. R. “*Adoption and impact of new agriculture technology on tribal agriculture*”. Serials Publication, New delhi, 2008: pp 998.
8. Sandeep Kataria and Dilsher Kaur. Ethnopharmacological approaches to inflammation-explorine medicinal plants. *Indian Journal of Natural Product and Resoruces*, 2013; 4(3):pp295-305.
9. Yadav S R and Sardesai M M. “*Flora of Kolhapur District*”, Shivaji University, Kolhapur, 2002.