



Medicinal plants for treatment of joint pain in rural area of district Ambedkar Nagar (U.P.), India

Tej Prakash

P.G.Department of Botany, Dr. Ashok Kumar Smarak P.G. College,
Akbarpur, Ambedkar Nagar (U.P.), India

Abstract

The present paper reports the therapeutic use of medicinal plants for treatment of joint pain by rural people of Ambedkar Nagar district. Total 15 plants belonging to 11 families were identified which were being used by people of the study area. The information about the plants for treatment of joint pain was gathered from rural people, local Vaidyas and Hakims etc.

Keywords: Joint pain, Medicinal plants, Treatment and Rural area of Ambedkar Nagar.

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Introduction

Medicinal plants are main ingredients of local medicine and are of vital importance in traditional healthcare. Atharva-ved is oldest world literature on the plants used against several diseases.

A part from the tribal group many other forest dwellers and rural people also possess unique knowledge about plants (Jain, S.K., 1991). Moreover, there is a considerable economic benefits in the development of medicine and in the use of medicinal plants for treatment of various diseases (Azaizeh, H. et. al., 2003).

Joint pain discomfort that arises from any joint point. Joint pain can be mild, short term nuisances or chronic condition that affects quality of life and independence. Joint pain may arise with or without any movement of body part. It can also be caused by injury, affecting any part of ligament, bursae or tendons surrounding the joint.

Several medicinal plants have been used since time immemorial for treatment of joint pain. Some specific plants like *Alstonia scholaris*, *Aloe vera*, *Bacopa monnieri*, *Boerhavia diffusa*, *Curcuma longa*, *Datura stramonium*, *Euphorbia hirta*, *Linum usitatissimum*, *Moringa oleifera*, *Ricinus communis*, *Solanum nigrum*, *Thevetia peruviana*, *Trigonella foenum-graecum*, *Vitex negundo* and *Zingiber officinale* have been used for treatment of joint pain in rural area of Ambedkar Nagar district of Uttar Pradesh. The traditional system of medicine is still effective in rural areas of India for treatment of various ailments (Sharma, P.P. and Majumdar, A.M., 2003, Jagtap, S.D., 2008, Singh, A. and Singh, P.K., 2009). A plant may possess one or more biologically active

compounds that may show positive interaction with body compounds and help us getting rid of specific disorder.

The present work deals with the traditional use of plants as medicines for treatment of joint pain in rural area of district Ambedkar Nagar (U.P.), India .

Materials and Methods

The study was conducted in rural area of district Ambedkar Nagar. District Ambedkar Nagar is located at latitude -26.407057, longitude - 82.397972. Ambedkar Nagar district is bounded on the north by Basti and Sant Kabir Nagar districts, on the north-east by Gorakhpur district, on the south by Sultanpur district on the west by Faizabad district, on the east by Azamgarh district and the south-east by Shahganj tehsil of Jaunpur district. The total area of the district is 2,520 km square. The total length of the district from east to west is approximately 75 km and the breadth from north to south is about 42 km. The district of Ambedkar Nagar forms a part of the central Ganga basin. The soils of the Ambedkar Nagar district are alluvium.

The Sarayu river is the main river and dislocated at the northern boundary of the district. The Tanda,

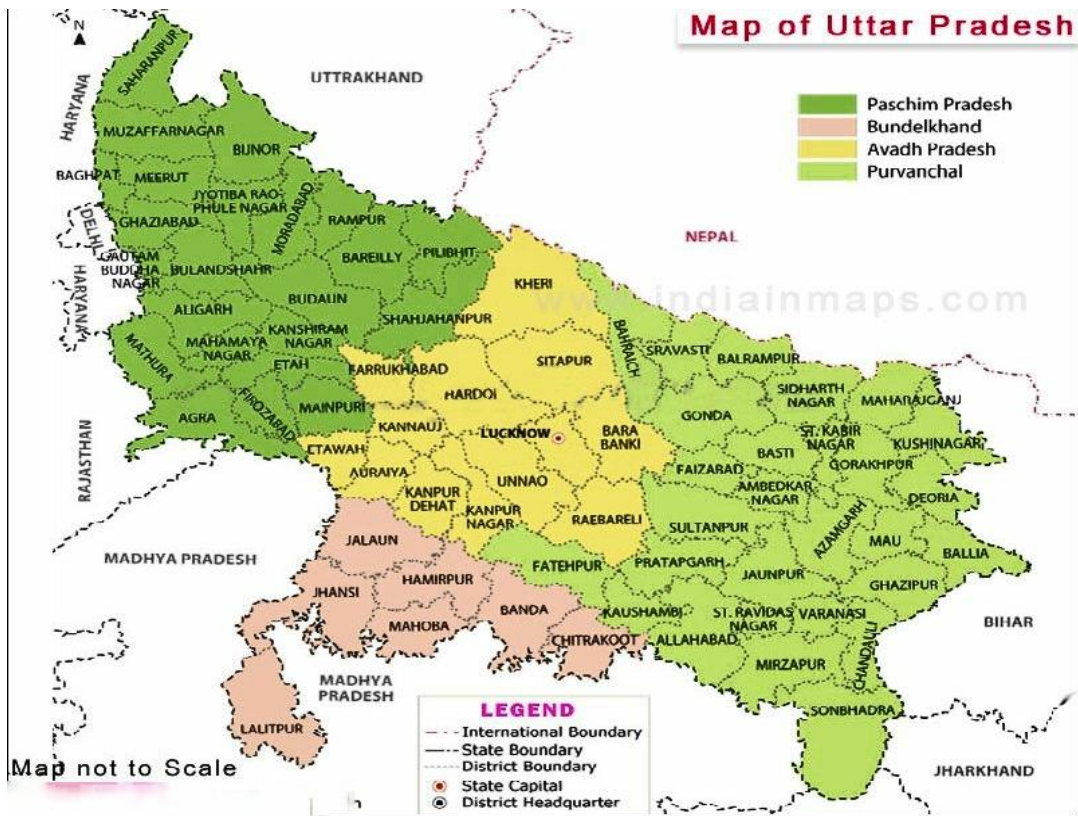
Rajesultanpur, Ramnagar and Baskhari blocks are located along this river and use its water for irrigation. Irrigation in the Baskhari block is also from lake Devhat, the Rajesultanpur lake and the Hanswar lake. Lake Darvan provides water in the Katehari block. The Akbarpur, Bhati, Bhiyaon and Jalalpur blocks depend upon smaller rivers and seasonal streams. The city of Akbarpur is situated on the banks of the river Tons (Tamsa), which divides the city into the two parts Akbarpur and Shahzadpur with the later being the main commercial centre of the city (Map-1 , 2 & 3).

The study was conducted (January-2019 to January-2021) in the rural area of Ambedkar Nagar district in Uttar Pradesh. A small tribal population and a vast rural mass had a rich traditional knowledge of use of plants as drug for treatment of joint pain.

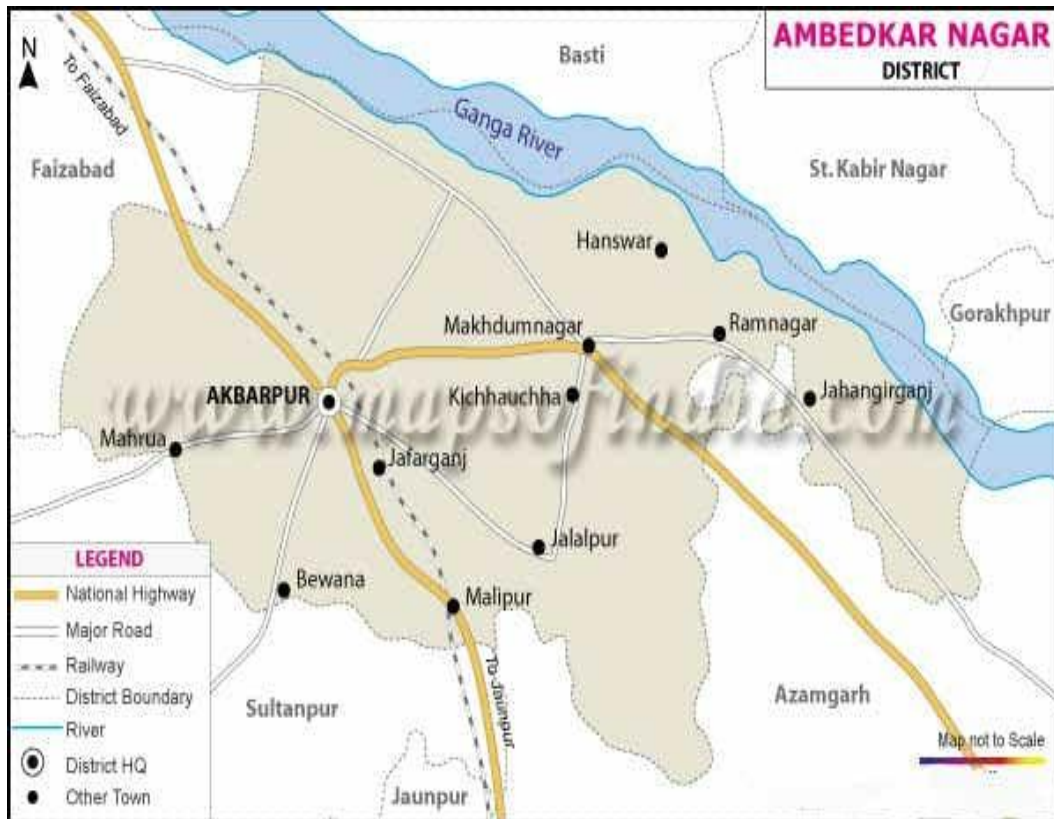
The information about plant was gathered during field visit by contacting and interviewing traditional healers and other rural people, local Vaidyas, Hakims for treatment of joint pain. Plants have been identified in Plant Pathology Lab, Dr. Ashok Kumar Smarak P.G.College, Ambedkar Nagar (U.P.), India and with the help of books of Indian medicinal plants (Kirtikar, K.R. and Basu, B.D., 1935), Glossary of Indian medicinal plants (Chopra, R.N. et.al., 1956). A detail of plants are mentioned in Table -1.



Map 1: Location of study area in India.



Map 2: Location of study area in Uttar Pradesh



Map : 3 –Location of study area in Ambedkar Nagar district rural area

Results and Discussion

A total of 15 medicinal plants distributed in 11 families are documented in Table-1. The people of studied area still had strong belief in herbal treatment. Herbal treatment is cheap, convenient and easily available with fewer side effects and more popular in rural area in comparison to modern medicines. Herbal plants are used in the treatment of rheumatoid arthritis (Amadeep Kaur et.al., 2012). Seeds of *Jatropha curcas* were used for arthritis (Khafagy, S.M. et.al., 1997). A study published revealed that both a ginger extract and one containing only gingerols and other non gingerol components were effective in preventing joint inflammation and damage (Funk, J.L. et. al., 2009).

In the present study, it was found that plants commonly used in traditional medicines in rural areas were still found in urban areas of Ambedkar Nagar and were frequently used by local inhabitants for various diseases. It is essential that ethnobotanical investigation should persistently be carried on and efforts should be made for proper protection, cultivation and conservation of the seprecious medicinal plants on large scale.

Table: 1- A list of Medicinal plants reported from district Ambedkar Nagar rural area

S.No.	Botanical Name	Common name	Family	Plants parts used
1	<i>Alstonia scholaris</i>	Chhatium	Apocyanacea	Stembarks
2	<i>Aloe vera</i>	Ghritkumari	Xanthorrhoeaceae	Leafpulp
3	<i>Bacopa monnieri</i>	Brahmi	Scrophulariaceae	Leaf
4	<i>Boerhavia diffusa</i>	Punarnava	Nyctaginaceae	Leaf
5	<i>Curcuma longa</i>	Haldi	Zingiberaceae	Rhizomes
6	<i>Datura stramonium</i>	Dhatura	Solanaceae	Leaf
7	<i>Euphorbia hirta</i>	Dudhi	Euphorbiaceae	Wholepart
8	<i>Linum usitatissium</i>	Tulshi	Linaceae	Seed
9	<i>Moringa oleifera</i>	Munga Sahjan	Moringaceae	Seed
10	<i>Ricinus communis</i>	Arandi	Euphorbiaceae	Seed
11	<i>Solanum nigrum</i>	Makoi	Solanaceae	Leaf
12	<i>Thevetiap eruviana</i>	Kaner	Apocynacea	Leaf
13	<i>Trigonella foenum – graecum</i>	Methi	Fabaceae	Seed
14	<i>Vitex negundo</i>	Nirgundi	Lamiaceae	Root
15	<i>Zingiber officinale</i>	Adrak	Zingiberaceaes	Rhizome

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