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Folk Medicine of Garhwa District, Jharkhand, India

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Abstract
An account of traditional uses of 25 species of angiosperms from Garhwa district, Jharkhand is reported in this paper. The report is an outcome of ethnobotanical survey of 5 villages amoung 4 tribal communities (Oraon, Kharwar, Parhaiya, Korwa) and collective data of common name, used plant part, diseases, ethnomedicinal uses and community groups.

Keywords
Ethno-medicine, Traditional uses, Herbal remedies, Garhwa, Jharkhand, Tribe.

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INTRODUCTION:
Garhwa district is a part of Palamu division in the state of Jharkhand. It is bounded by three states Bihar, Uttar Pradesh, Chhattisgarh, and the district Palamu and Ranchi of Jharkhand state and covered with 33.36% of the forest [1]. Various tribal communities like Oraon, Chero, Kharwar, Korwa and Parhaiya are living in the remote and accessible parts of the district (Laatdag, Bhudha Paras, Bana, Bhandariya, Kotam). The previous work on ethnobotanical study was done by different workers on study area before establishment of Jharkhand [2-21] and after that [22-40].

The exploration studies were conducted based on the information gathered from tribal pockets and rural villages, which depend mostly on the forests for their needs and have sound knowledge over herbal remedies. The plants were identified and persevered according to standard methods [41]. All the plant specimens are kept in the Duthie Herbarium (DUTHIE), Department of Botany, University of Allahabad, Prayagraj. The information of the plants is enumerated with botanical names, author citation, family, vernacular name (VN), plant part used (P), Disease (D), Uses (U), locality (L), collector name (CN) (Satya Narain: SN and Tasbeeha Taab Zarrin: TTZ) and field number (FN) along with abbreviated forms.

1. **Acalypha indica** L. (Amaranthaceae)
VN: Kuppi
P: Entire plant
D: Blood pressure, dental problems, fitness supplement and poisonous animal bite.
L: Garhwa
CN: SN
FN: 37299
U: Clean the root and powder it then give with water to maintain blood pressure, refreshment tonic. The stem is directly used as Datun. The paste of leaves applies on effected area of animal bite.
2. **Achyranthes aspera** L. (Amaranthaceae)
VN: Kukarhari
P: Leaves
D: Scorpion bite
L: Tandwa
CN: SN
FN: 37174
U: Paste of leaves apply on effected area. As per indigenous people believe one should give it to injured person without taking its name.
3. **Aegle marmelos** (L.) Correa (Rutaceae)
VN: Bel
P: Fruit
D: Anxiety and sunstroke / heatstroke
L: Obra

CN: SN
FN: 37050
U: The pulp of fruit is mixed with water and drained with strainer to get the juice in liquid form and drink it two times a day daily.

4. **Asparagus racemosus** Willd. (Asparagaceae)
VN: Satavar
P: Root
D: Less milk production in women.
L: Ranka Forest
CN: SN
FN: 37622
U: The powder of root is mixed with cow milk and then served to patient.
5. **Azadirachta indica** Juss. (Meliaceae)
VN: Neem
P: Leaves
D: Fever, etching and wound
L: Satbahini Jharna
CN: TTZ
FN: 37515
U: Paste leaves on wound and boiled leave water used for bathing in etching and fever.
6. **Boerhaavia diffusa** L. (Nyctaginaceae)
VN: Puruni
P: Root
D: Jaundice
L: Kotam
CN: TTZ
FN: 37609
U: Fine powder is directly given to the patient with water, cure fully in 1 week.
7. **Calotropis procera** (Aiton) Dryand. (Apocynaceae)
VN: Madar
P: Latex
D: Pricking of plant spine or thorn in body
L: Tandwa
CN: TTZ
FN: 37196
U: The latex is poured directly to the affected area and spine will ooze out within 4-6 hours.
8. **Carica papaya** L. (Caricaceae)
VN: Papita
P: Fruit
D: Body fatigue
L: Bana
CN: TTZ
FN: 37630
U: Fruit cubes and shake with cow milk and sugar is consumed directly by people.
9. **Cocos nucifera** L. (Arecaceae)
VN: Nariyal
P: Coconut milk (Endosperm)
D: Skin burn and scald
U: The Leaves of *Ficus benghalensis* crushed to be a fine paste and mixed with coconut milk or oil. This paste is applied on the affected area of patient.
10. **Cyperus rotundus** Kern. (Cyperaceae)
VN: Motha
P: Root nodes
D: Intermittent fever
L: Danro river
CN: SN
FN: 37127
U: Make a mixer of root nodes and black piper in 1:1 ratio, add some salt as well as water in required quality. Give that mixer 5 table spoons one time a day.
11. **Datura metel** L. (Solanaceae)
VN: Dhatur
P: Leaves and seeds
D: Pain and swelling
L: Tandwa
CN: SN
FN: 37132
U: The leaf and seed are warm with mustard oil and garlic to apply on effected area.
12. **Delonix regia** (Hook.) Raf. (Fabaceae)
VN: Dacdol
P: Seeds and bark
D: Cholelithiasis and renal stone
L: Kalayanpur
CN: TTZ
FN: 37276
U: Paste of seeds and bark boiled with water are given to patient.
13. **Dioscorea hamiltoni** Hook. *f*. (Dioscoreaceae)
VN: Gathi
P: Root
D: Fever and toothache
L: Ranka Forest
CN: SN
FN: 37619
U: Tuber is crushed and takes it directly.
14. **Euphorbia hirta** L. (Euphorbiaceae)
VN: Dhudh-patti
P: Whole plant
D: Dysentery and gastric issues
L: Danro riverbank, Tandwa
CN: TTZ
FN: 37101
U: The paste of whole plant is prepared with a little sugar and curd is given to patient in both situations.

15. **Euphorbia neriifolia** L. (Euphorbiaceae)
VN: Seej
P: Leaves
D: Cough and cold
L: Bana
CN: TTZ
FN: 37642
U: Leaves mixed with fruit of *Mangifera indica* and warm the mixture, add some cow "ghee" and gives the children 2-3 days daily.
16. **Ficus benghalensis** L. (Moraceae)
VN: Berh ki birohi
P: Aerial root
D: Any type of pain
L: Hadraj
CN: TTZ
FN: 37410
U: Dried aerial root of *Ficus benghalensis*, root and seeds of *Calotropis procera*, cloves of *Allium sativum* and latex of *Ferula asafoetida* are cooked in mustard oil. This prepared oil is applied on painful areas of patient.
17. **Kalanchoe pinnata** (Lam.) Pers. (Crassulaceae)
VN: Patharchatta
P: Leaves
D: Renal stone
L: Meral
CN: TTZ
FN: 37623
U: The fresh leaves pulp is mixed with boiled grain water of *Hordeum vulgare* then gives it to the patient at least 2 times a day.
18. **Madhuca longifolia** (J. Koenig ex L.) J. F. Macbr. (Sapotaceae)
VN: Mahua
P: Stem and fruit
D: Toothache, Pyorrhea, and bacterial infection.
L: Garhwa
CN: TTZ
FN: 37560
U: Stem is used as Datun and fruit is consumed directly for refreshment.
19. **Mirabilis jalapa** L. (Nyctaginaceae)
VN: Ghumari
P: Seed
D: Dizziness
L: Jobraiya
CN: TTZ
FN: 37520
U: The seed is used for making garland with thread and it is wear by patients for 3-5 day.
20. **Ocimum tenuiflorum** L. (Lamiaceae)
VN: Tulsi
P: Leaves
D: Cough and cold
L: Bana
CN: TTZ
FN: 37650
U: Decoction of leaves with tea, sugar, black piper and cloves is given to the patient.
21. **Psidium guajava** L. (Myrtaceae)
VN: Amrood
P: Leaves
D: Blisters in mouth
L: Meral
CN: TTZ
FN: 37572
U: The young leaves of *Psidium guajava* and *Cajanus cajan* is used formally to give the patient for chewing like Piper betle.
22. **Tagetes erecta** L. (Asteraceae)
VN: Genda
P: Leaves
D: Ear pain
L: Bana
CN: TTZ
FN: 37651
U: Extract of fresh leaves is used as ear drop for 3-4 times in a day.
23. **Tinospora cordifolia** (Lour.) Merr. (Menispermaceae)
VN: Guruch/ Giloye
P: Root
D: Corona, Dengue, High grade fever, Malaria and Typhoid.
L: Garhwa
CN: SN
FN: 37559
U: Decoction of root with salts and black piper is used.
24. **Tridex procumbens** L. (Asteraceae)
VN: Kukrilwa
P: Leaves
D: In snake bite and common wound.
L: Obra
CN: TTZ
FN: 37001
U: Fresh leaves extracts as well as paste is applied on wounded area and used as antiseptic.
25. **Wrightia arborea** (Dennst.) Mabb. (Apocynaceae)
VN: Khirna
P: Leave, Root.
D: Headache, fever, dysentery, toothache.
L: Kotam
CN: TTZ

FN: 37631
U: Dried root powder is given in headache and viral fever. Dried leaves powder is given in dysentery and leaves with salt or sugar in toothache.

CONCLUSION:

The aim of this study is to give a consolidated account of the entho-medicinal plant wealth of the Garhwa district of Jharkhand, being used for the treatment of common aliments through the traditional system of medicines.

The paper contains 25 species, out of which some information is not reported earlier in literature therefore these are new to human beings.

The traditional information belongs to plant species used by indigenous people are related to very common plant species of Garhwa district to easily assessable for all tribal communities. The plants used for medicinal purposes are found all over the district, cultivated land, forest, wastelands as well as near to the houses of communities.

The people using these plants for common and frequently occurring diseases i.e., wounds, all type of fevers, cough and cold, gastric issues, pain and swelling, blood pressure, dental issue, anxiety, fatigue as well as skin issues and all parts of plants are used for the cure of any disease. The mode or even whole plants of use is external as well as internally. Plant parts like root, shoot, stem, leaves, fruit, seeds are used in different forms to cure the disease by using different procedures. To conserve the important and traditional knowledge of indigenous people, the information was collected during field study in different season.

Now a day the government is doing good work to provide a medical facility in every part of study area. This information should be helpful for the further use of traditional as well as modern systems of medicine i.e., ethnopharmacology, ethnophyto chemistry as well as in medico botany.

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