Ethno-Veterinary Plants Used In Foot And Mouth Disease By Bheel Bhiala And Barela Tribal Groups Of Sendhwa Dist. Barwani, M. P., India

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Abstract
Sendhwa block of Barwani district is situated inside the western a part of Madhya Pradesh, India & the most fertile region. Lands are mainly rain-fed. the existing look at with geo-botanical approach has been performed in the district to collect facts on Foot and Mouth disease (FMDs) to include This examine looks at neighborhood use of (FMDs) accumulated from forest areas and trading of 24 FMDs on the basis of field surveys and taxonomic identification of flora. It highlights the importance of expertise how tribal groups use forests, and the need to develop the targets of management of these forests to consist of a multiplicity of targets and merchandise with geo-botanical technique. It’s far inhibited with the aid of tribal groups like Bhil, Bhilala, and Barela. An intensive and extensive plant survey of area turned into performed throughout 2021-2022 present look at observes 20 families and 24 genera and 24 species. The observe indicates the importance of information on the ethno veterinary plants which should be assigned to woodland lands .Tribal communities used those texa as FMDs in traditional way that is utilized in extraordinary types of sicknesses . Most frequently used plant species are Acacia nilotica (L.)Delile, Aegle marmelos (L.) Cor., Aristolochia bracteolata Lam., Azadirachta indica Juss.. Barleria prionitis L., Bauhinia variegata L., Curculigo orchioides Gaertn., Lawsonia inermis L., etc. Most of the cases plant decoctions as external wash are applied sometime chemicals like e-copper sulphate, salt, Kerosine are used as external washes. In some cases ethnovereinary and allopathy treatment have been taken in combination.

Key words: FMDs, Sendhwa, tribal communities, Bheel, Bhiala, and Barela.

Introduction
India has a very rich heritage of traditional healthcare system for livestock through Ayurveda, Unani and Homeopathic system of medicine which has been used since time immemorial and there is another system of medicine parallel to this which is called as folk medicine, tribal medicine or ethno medicine. Wooded area productions an important role within the socio-economic life of tribal human beings in fact their lifestyles can’t be imagined without wooded area. Series and promote of various minor forest merchandise for business functions are considered as vital way in their livelihood. The tribal humans seasonally acquire numerous FMDs, to meet the wishes for their meals, fodder and medicinal drug (Soren, P. & Naik2020.) Madhya Pradesh holds maximum rank in tribal population of India. In keeping with 1991 census, the tribal population of the country is ready 153, 99,034 which debts 23.27% of the nation’s overall populace. There are 46 tribal communities inside the kingdom divided into greater than 100 ethnic corporations. The nation is very wealthy in biodiversity and ethno-diversity of the United States of America. Forests are inseparable part of the tribal’s.
The tribal’s are essentially forest dwellers and have been depending upon woodland for generations because it
no longer best offers them protection and safe haven however additionally refuge to their pantheons and lots of
beneficial and malevolent spirits and ghost and even to their totem. The tribal and forest interface, though,
 isn’t limited to placed a wooded area as a tribal habitation. It’s far crucial to discover the principle problems
which challenge their courting many of the forest for their bodily and cultural survival, supposed as
They are nearly completely depending on forests for food, shelter, especially in medicine and garb. They
collect roots, tubers, etc., and especially FMDs used plants as well as many others for satisfy their day to day
necessities. little or no paintings has been carried out on FMDs aspects of tribal’s for uplifftment of their
financial popularity through domestically available raw materials. A few crucial studies from ethno veterinary
factor of view have been made at positive locations (Bhalla et. al., 1986, Jain 1988, Maheshwari 1990,

Study area
Sendhwa is the headquarters for Sendhwa tehsil, and, the largest town in the district. The call Sendhwa turned
into derived after the rulers Sendhwa at length of holkars (Sisodiya & Sainkhediya 2018). Geographically
Sendhwa is positioned 16 km from Maharashtra & Madhya Pradesh Border. Sendhwa lies among parallel of
range 21°41’05″N and 75°05’43″E. The vicinity is bounded by the Rajpur tehsil to the north, Warla tehsil in south,
Niwali to west, and Khargone district to east. The eastern a part of the district is blanketed by way of
Satpura hill levels and northerly a part of Malwa plateau, and Narmada valley. Sendhwa fortress is situated in
the middle part of city and it became constructed in tenth Century. It is classical instance of 4 directional Gate
with Temple at most important entry gate. In look at region the simplest crop is a single maize as well as
cotton, and soybean harvest, as a consequence products from the wooded area play a giant position inside the
livelihood of local people, mainly the tribal groups. The land surface attains a most altitude of 409 m (1,342 ft)
above imply sea level. Demographically Sendhwa had a populace of 56,485 (Census 2011). Sendhwa has a
mean literacy price of 63%.

Methodology
Research of traditional vegetation has been done in Sendhwa at some point of 2022-2023 information on the
plant species and facts in different seasons of the year. The research is targeted on both quantitative and
qualitative information the usage of empirical field work. The respondents have been given a structured
interview agenda. Plant series finished with the resource of well-known technique (Jain and Rao, 1977). Plant
specimens were preserved by means of dipping the whole specimens in saturated solution of Mercuric chloride
and alcohol. Dry and preserved plant life installation on herbarium sheets by means of adhesive glue and
fevicol. Identification of flowers finished with the help of vegetation (Verma et.al., 1993; Mudgal et al.1997;
Khanna et al., 2001; Shah, 1978; Duthi, 1960; Gamble, 1915; Hains, 1921-1924; cook, 1903; Hooker, 1872-
1897; Naik, 1998) and different taxonomic literature.

Review of literature
Botanical examine is a critical prerequisite for an entire lot vital studies in tropical community ecology. For the
conservation and sustainable control of any wooded area; it requires an extremely good brilliant of its
biodiversity (Sainkhediya 2016). The richness of flowering plants makes India one of the mega variety global
locations inside the global with 4 biodiversity hotspots and three mega facilities of endemism. India ranked 7th
among 17 mega range international places of the arena and greater than 17,000 species of higher flora are
stated to India (anonymous 1993). Botanical information is essential for human survival due to loss of
medicinal remedy aren’t to be had in a long way off regions on this place so humans have rely upon traditional
natural plants.
keeping this in mind this examine is finished to discover Ethno veterinary information in Sendhwa dist.
Barwani, Madhya Pradesh, India because of the truth there can be no paintings is accomplished in this region.
A small painting is completed on Sendhwa vicinity through Ray and Sainkhediya 2012, Sainkhediya 2014;
Sainkhediya, and Ray, 2014, Sisodiya & Sainkhediya 2018; Sainkhediya 2019; Ray & Sainkhediya & Patil
2019; Sainkhediya, 2019; Sainkhediya et. al. 2021; Sainkhediya and Rawat 2022; Sainkhediya & Trivedi
2021; Sainkhediya et. al. 2022; Sainkhediya and Aahirwar 2022; Sainkhediya 2022; Sainkhediya and Rawat
2022; Sainkhediya and Aske 2022; Sainkhediya and Muvel 2022; Sainkhediya and Aahirwar 2022; Sainkhediya
et. al. 2022, Mishra, et. al. 2022, Trivedi, & Sainkhediya 2022, but no work has been performed on monetary
cost of FMDs of the location.
Results & Discussion
Sendhwa block of Barwani district is situated inside the western a part of Madhya Pradesh, India & the most fertile region. Lands are mainly rain-fed. the existing look at with geo-botanical approach has been performed in the district to collect facts on Foot and Mouth disease (FMDs) to include This examine looks at neighborhood use of (FMDs) accumulated from forest areas and trading of 24 FMDs on the basis of field surveys and taxonomic identification of flora. It highlights the importance of expertise how tribal groups use forests, and the need to develop the targets of management of these forests to consist of a multiplicity of targets and merchandise with geo-botanical technique. It’s far inhibited with the aid of tribal groups like Bhil, Bhilala, and Barela. An intensive and extensive plant survey of area turned into performed throughout 2021-2022 present look at observes 20 families and 24 genera and 24 species. The observe indicates the importance of information on the ethno veterinary plants which should be assigned to woodland lands .Tribal communities used those taxa as FMDs in traditional way that is utilized in extraordinary types of sicknesses. Most frequently used plant species are Acacia nilotica (L.)Delile, Aegle marmelos (L.) Cor., Aristolochia bracteolata Lam., Azadirachta indica Juss., Barleria prionitis L., Bauhinia variegata L., Curculigo orchioides Gaertn., Lawsonia inermis L., etc. Most of the cases plant decoctions as external wash are applied sometime chemicals like copper sulphate, salt, Kerosine are used as external washes. In some cases ethno veterinary and allopathic treatment have been taken in combination.

Conclusion
This article analyses the role of FMDs plants in livelihoods-development projects and considers recent tasks meant to beautify their conservation and sustainable control. It recommends policies to optimize the potential of FMDs plants, each to aid rural livelihoods and to contribute to India's social, monetary, and environmental properly-being. Investigations had been made on medicinal values of better flora. A complete know-how of the complexity of wooded area usage with the aid of neighborhood tribal groups ends in a need to change management techniques for these regions.

Acknowledgement
Help and co-operation throughout plant survey rendered via nearby humans of Sendhwa is exceptionally acknowledged.

References
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Table-1: FMDs taxa used by Bheel, Bhiala and Barela tribal communities

<table>
<thead>
<tr>
<th>Sn</th>
<th>Botanical name</th>
<th>Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Acacia nilotica (L.) Delile</td>
<td>Leguminosae</td>
</tr>
<tr>
<td>2</td>
<td>Aegle marmelos (L.) Correa</td>
<td>Rutaceae</td>
</tr>
<tr>
<td>3</td>
<td>Allium sativum L.</td>
<td>Liliaceae</td>
</tr>
<tr>
<td>4</td>
<td>Aristolochia bracteolata Lam.</td>
<td>Aristolochiaceae</td>
</tr>
<tr>
<td>5</td>
<td>Azadirachta indica A. Juss.</td>
<td>Meliaceae</td>
</tr>
<tr>
<td>6</td>
<td>Barleria prionitis L.</td>
<td>Acanthaceae</td>
</tr>
<tr>
<td>7</td>
<td>Bauhinia variegata L.</td>
<td>Leguminosae</td>
</tr>
<tr>
<td>8</td>
<td>Brassica juncea (L.) Czern.</td>
<td>Brassicaceae</td>
</tr>
<tr>
<td>9</td>
<td>Calotropis procera (Aiton) Dryand.</td>
<td>Apocynaceae</td>
</tr>
<tr>
<td>10</td>
<td>Citrullus colocynthis (L.) Schrad.</td>
<td>Cucurbitaceae</td>
</tr>
<tr>
<td>11</td>
<td>Clerodendrum phlomidis L.f.)</td>
<td>Lamiaceae</td>
</tr>
<tr>
<td>12</td>
<td>Colocasia esculanta (linn) melet,</td>
<td>Araceae</td>
</tr>
<tr>
<td>13</td>
<td>Coriandrum sativum L.</td>
<td>Apicaeae</td>
</tr>
<tr>
<td>14</td>
<td>Curculigo orchioides Gaertn.</td>
<td>Hypoxidaceae</td>
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<tr>
<td>15</td>
<td>Curcuma longa L.</td>
<td>Zingiberaceae</td>
</tr>
<tr>
<td>16</td>
<td>Ficus benghalensis L.</td>
<td>Moraceae</td>
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<tr>
<td>17</td>
<td>Lawsonia inermis L.</td>
<td>Lythraceae</td>
</tr>
<tr>
<td>18</td>
<td>Nerium indicum L.</td>
<td>Apocynaceae</td>
</tr>
<tr>
<td>19</td>
<td>Prosopis cineraria (L.) Druce,</td>
<td>Leguminosae</td>
</tr>
<tr>
<td>20</td>
<td>Ricinus communis L.</td>
<td>Euphorbiaceae</td>
</tr>
<tr>
<td>21</td>
<td>Semecarpus anacardium L.f.</td>
<td>Anacardiaceae</td>
</tr>
<tr>
<td>22</td>
<td>Sesamum indicum L.</td>
<td>Pedaliaceae</td>
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<tr>
<td>23</td>
<td>Trigonella foenum-graecum L.</td>
<td>Leguminosae</td>
</tr>
<tr>
<td>24</td>
<td>Vitex negundo L.</td>
<td>Verbenaceae</td>
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</tbody>
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