Ethnoveterinary Plants Used for Wounds Healing By Bhil, Bhilala and Other Tribes for Alirajpur District, Madhya Pradesh

Chouhan Sohan Singh¹, Ray Sudip²

¹Department of Botany, Govt. PG College, Jhabua, MP, India
²Department of Botany, PMB Gujarati Science College Indore MP, India

Abstract: Alirajpur district is located in the corner of western part of MP. It has three tehsil namely Alirajpur, Jobat and Bhabra. Tribals are densely populated in the study area Bhil, Bhilala, Barela and Pateleya are the dominant tribes inhabiting in Alirajpur district. Ethnoveterinary survey of plants was carried out in the tribal area Alirajpur district in 2010-2012. Present paper deal with 30 plant species and 30 Genera belonging to 24 families.

Keywords: Bhil, Bhilala, Alirajpur, Ethnoveterinary, wounds healing

1. Introduction

Alirajpur district is located in the corner of western part of MP and lies in between 73°-30’ to 75°-01’E and 21°-30’ to 23°-55’ N. The district occupies an area of 2,165 sq km. It has three tehsil namely Alirajpur, Jobat and Bhabra. Tribals are densely populated in the study area and accounts 80.5 percent of total population. Bhil, Bhilala, Barela and Pateleya are the dominant tribes inhabiting in Alirajpur district. Most of the tribal populations are using plants for their domestic live stock. The Ethnoveterinary plants and traditional knowledge of ethno medicines are gradually depleting due to lack of proper records and documentation.

2. Methodology

Ethno botanical survey was conducted to document the hidden knowledge of Ethnoveterinary plants used by tribals of Alirajpur district during 2010 to 2013. Interview was arranged among tribals local medicine men, Badwas and Bhagat and other experienced persons. Prepared questions were asked and discussed about therapeutic uses of wound healer plants. Plants were immediately collected and identified with the help of flora (Hooker 1872-1897; Hains 1924; Jain and Rao 1977, Ray 1984; Verma, et al., 1993; Mudgal et al., 1997; Singh et al., 2001) and available literature. Herbarium was prepared following standard method (Jain and Rao, 1977). Recent nomenclature has been followed. Authenticity of plant uses were cross checked and confirmed (Jain.2004; Katewa et al., 2010). All the collected plant specimens were deposited in the herbarium of department of Botany, P.M.B. Gujarati Science College Indore.

3. Results and Discussion

Present study reports 30 plants wound healing of cattle these plants are distributing in 24 family and 30 genera (Table-1). Cultivated and wild plants are used for recovery of wounds of animal. Most frequently used plants are Annona squamosa L., Azadirachta indica A. Juss., Datura metel L., Holoptelea integrifolia Planch. Ipomoea carnea Jacq., Justicia adhatoda L.L antana camara L., Lawsonia inermis L., Nyctanthes arbor-tristis L., Phyllanthus amarus Schumach. & Thonn., Ricinus communis L., Sida acuta Burm.f., Solanum americanum Mill. and Tridax procumbens (L.) L. Leaves (13) are used as most commonly used plant part constituting 95 percent of herbal preparation followed by the flower (1), fruit(1), latex(4), leaves(13),root(3), Seeds (5) and Whole plant (3) (fig.1). Herbs (47%), shrubs (33%) and trees (20%) are
found in our studies (Figure 2). Herbal medicines are prepared mainly by soaking crushed plant part in water by boiling the plant. Fresh plants are collected from forest or respective localities. Mode of uses and amount of medicine prescribed vary from region to region. Fresh plants are effective then dried material.

![Figure 1: Plant part used](image)

![Figure 2: Life Forms](image)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Botanical Name</th>
<th>Family</th>
<th>Local Name</th>
<th>Ethnoveterinary Uses</th>
<th>Plant Part Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><em>Allium cepa</em> L.</td>
<td>Amaryllidaceae</td>
<td>Kanda</td>
<td>Crushed bulbs are administered to remove maggot infested wounds.</td>
<td>Bulbs</td>
</tr>
<tr>
<td>2.</td>
<td><em>Amaranthus spinosus</em> L.</td>
<td>Amaranthaceae</td>
<td>Cholai</td>
<td>Paste of whole plant is applied externally for quick healing of wounds.</td>
<td>whole plant</td>
</tr>
<tr>
<td>3.</td>
<td><em>Annona squamosa</em> L.</td>
<td>Annonaceae</td>
<td>Sitaphal</td>
<td>The leaf past applied on the wound.</td>
<td>leaves</td>
</tr>
<tr>
<td>4.</td>
<td><em>Argemone mexicana</em> L.</td>
<td>Papaveraceae</td>
<td>Katashla</td>
<td>Yellow latex and seed oils are given in chronic ulcerous wounds.</td>
<td>latex and seed</td>
</tr>
<tr>
<td>5.</td>
<td><em>Azadirachta indica</em> A. Juss.</td>
<td>Meliaceae</td>
<td>Neem</td>
<td>The leaf pastes externally the wound. Paste is also used to remove worms in it.</td>
<td>leaves</td>
</tr>
<tr>
<td>6.</td>
<td><em>Brassica rapa</em> L.</td>
<td>Brassicaceae</td>
<td>Sarso</td>
<td>Musterd oil mixed with paste of Allium cepa applied on wounds.</td>
<td>seed</td>
</tr>
<tr>
<td>7.</td>
<td><em>Calotropis procera</em> (Aiton)</td>
<td>Apocynaceae</td>
<td>Akda</td>
<td>The latex is directly administered for quick healing of wounds.</td>
<td>latex</td>
</tr>
<tr>
<td>8.</td>
<td><em>Catharanthus roseus</em> (L.) G.Don</td>
<td>Apocynaceae</td>
<td>Sadabhar</td>
<td>Whole plant extract is applied on wounds.</td>
<td>Whole plant</td>
</tr>
<tr>
<td>9.</td>
<td><em>Ceiba pentandra</em> (L.) Gaerth.</td>
<td>Malvaceae</td>
<td>Semal</td>
<td>Paste of stem bark and stem juice are applied externally on wounds.</td>
<td>stem</td>
</tr>
<tr>
<td>10.</td>
<td><em>Cocos nucifera</em> L.</td>
<td>Arecaceae</td>
<td>Nariyal</td>
<td>Seed oil is applied on wounds.</td>
<td>Seed</td>
</tr>
<tr>
<td>11.</td>
<td><em>Curcuma longa</em> L.</td>
<td>Zingiberaceae</td>
<td>Haldi</td>
<td>Rhizome powder with Ghee are warmed and applied on wound for quick healing.</td>
<td>Rhizome</td>
</tr>
<tr>
<td>12.</td>
<td><em>Datura metel</em> L.</td>
<td>Solanaceae</td>
<td>Datura</td>
<td>The leaf paste applied on the wound.</td>
<td>leaves</td>
</tr>
</tbody>
</table>
13. *Eclipta prostrata* (L.) L. Compositae Bhrangraj
   The poultice of the whole Plant is used for healing wounds and cuts.
   whole Plant

14. *Euphorbia hirta* L. Euphorbiaceae Dudhi
   Latex is applied on wounds to stop bleeding
   Latex

15. *Ficus benghalensis* L. Moraceae Pipal
   White latex is applied on maggot infested wounds.
   Latex

16. *Holoptelea integrifolia* Planch. Ulmaceae Ohla
   Leaf past is applied on Wounds to remove and killing worms.
   leaves

17. *Ipomoea carnea* Jacq. Convolvulaceae Naseda
   The leaves are warmed with edible oil and tied on wounds.
   leaves

18. *Justicia adhatoda* L. Acanthaceae Adusha
   A poultice of leave is used for healing fresh wound and inflammatory swelling.
   leaves

19. *Lantana camara* L. Verbenaceae Krmich
   Leaf juice is administered for quick blood clotting.
   leaves

20. *Lawsonia inermis* L. Lythraceae Mahandi
   Leaf decoction is used as wash on wounds.
   leaves

   Sapotaceae Mahua
   Boiled flowers are tied on injured part of body to cure wounds.
   flowers

22. *Nerium oleander* L. Apocynaceae Kaner
   Seed ashes and mustard oil are mixed for recovery of wounds.
   seed

23. *Nyctanthes arbor-tristis* L. Oleaceae Harsingar
   Leaf decoction is applied on maggot infested wound.
   leaves

   Phyllanthaceae Buiawla
   Leaf of juice is applied as dressing for wounds.
   leaves

25. *Plumbago zeylanica* L. Plumbaginaceae Chitrak
   The paste of root is applied on maggot infested wound to kill worms and quick recovery of wounds.
   root

26. *Ricinus communis* L. Euphorbiaceae Arandi
   Leaf juice is applied on the wounds for healing.
   leaves

27. *Senna tora* (L.) Roxb. Leguminosae Puwadiya
   Seed paste is applied over wounds and cuts.
   Seed

28. *Sida acuta* Burm,f. Malvaceae Wala
   Leaf juice of Sida acuta and Azadiracta indica are mixed and applied on wounds.
   leaves

29. *Solanum americanum* Mill. Solanaceae Buiregni
   Fruit paste is mixed with leaves of Heteropogon contortus used for recovery of wounds.
   Fruit

30. *Tridax procumbens* (L.) L. Compositae Kuradiya
   Leaves juice is applied as dressing for wound and stop bleeding.
   leaves

### 4. Conclusion

Some Ethnoveterinary plants are directly or indirectly related to uplift men of economy of local people these plants are *Annona squamosa* L., *Plumbago zeylanica* L., *Madhuca longifolia* var. *latifolia* (Roxb.) A. Chev., *Lawsonia inermis* L etc. Present study reveals that some plants have lost their existence in the area due to over exploitation; Government should conserve them in their natural habitat or in botanical gardens. People should encourage growing this Ethnoveterinary plants in their surrounding areas.

### 5. Acknowledgement

We are very much thankful to Prof. Santosh Nagar, Principal and Dr J. Sikka, Head of Botany Department, PMB Gujarati Science College, Indore for research and library facilities. First author is grateful to Dr. H. L. Anijwal, Principal, Govt. P.G College, Jhabua for encouragement and valuable suggestion. Help rendered by local informants and others are highly acknowledged.

### References