

Research Article

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Some Traditional Medicinal Plants Useful for Boil, Burn and for Wounds Healing

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Abstract

Traditional Medicinal plants are remarkable for their significant potential to treat a specific disorder. Over the world around 80% populations dependent on traditional medicines according to WHO. Plant diversity depends on local climatic condition and also on their adaptation capacity in changeable environmental condition. Plants are great source of primary health care due to presence of certain chemical compounds. Cut, Boil, Burn, Wounds are mainly affecting skin. Prevention of pathogenic attack in body plants can perform certain role known as herbal medicine. A total of 55 species of the plants of 35 different families were recorded for above purpose and the findings are listed and discussed.

Keywords: Boil burn; Herbal plants; Plant diversity; Wound

Introduction

Plants are used for treatment of certain disorders from a long ago [1]. Plants registered as a major source of medicinal preparations and also many drugs derived from herbal plants [2]. Around 25% drugs are derived by using plants [3]. Due to less hygienic situation mostly in rural areas wounds is common disorder for skin problem [4].

Boil, Burn, wounds are accidental physical damage of body by loss of skin. Use of firewood for cooking and other household activities sometimes being reason for burning of skin [5]. Uses of the plants as a source of medicine for boil, burn wounds are important for healthcare in rural areas.

Wound healing process start from damage of skin. A wound completely healing depends on degree of injury, human resistance capacity, infection potential of pathogens and early effective treatment procedure. Above process completing following several steps events. During cutting of skin it is prime need to stop bleeding from body. Many plants are showing better performance for this purpose like *Aloe vera*, *Tridax procumbens* etc. Use of *Carica papaya* latex for wound healing was noticed by Gurang and Basent, [6]. Wound healing ethno- pharmacological potentials of selected medicinal plants used by malayali tribals was noticed by Subramaninan et al. [7].

A large group of the plants are marked as efficient for boil, burn wounds and for skin related problems [8-10]. Wound healing capacity of papaya (*Carica papaya*) latex noticed by Basent, [6]. Its fruits are also used for this purpose. Wounds may be chronic or by accidental. It is a physical injury of skin responsible for loss of colour of skin and loss of structure. Applying plants for control of boil, burn wounds are beneficial process for repairing of body. Due to presence of antibiotic or antiseptic nature chemicals plants are remarkable for many disorders [11].

Chemicals derived from plants need for proper identification, formulation, use and also for protection. Traditional knowledge of plants for medicinal uses in rural areas is of significant potential connections between plants and local peoples. Plants providing low cost, efficient, less side effect treatment for certain problems. As an estimation of WHO 80% peoples of the world depends on herbal medicine. A review on medicinal plants with potential wound healing activity recorded by Kumrasamyraja et al. [12].

Around 70% of the pharmaceutical products for wound control are made by using plant resources. Wounds can be referred as physical

disabilities [13]. Wounds are marked as injury in normal skin structural, anatomical physiological and functional variation [14]. Many plants supporting natural repairing process of skin [15]. Plants are also variable for use in blood coagulation and cleaning of skin/ wounds etc [16,17]. Wound healing of some medicinal plants was reviewed by Gulzar et al. [18].

India is rich center of floral diversity which is distributed over the country. Around 25% of drugs are derived from varied plant species and used as medicinal purpose in rural areas [19]. Healing of wound is essential for filling/ restoring of the cells in affecting area of body [20]. Use of the plants in indigenous traditional medicine system is very old in India [21]. Rural peoples mostly used the plants for treatment of various ailments. Ethno botany is old in India [22-24]. A review on the use of *Aloe vera* for wound healing was made by Ratree et al. [24]. Ethno botanical study on herbal medicines for wound healing among tribal peoples in southern part of India was made by Ayyar et al. [21]. Medicinal plants used by traditional healers in Kancheepuram district of Tamil nadu India was recorded by Muthu et al. [22].

In India there are 2500 plants having medicinal values and near 6000 plants are used in traditional medicinal system. Rural Indians using traditional medicinal plants for various purpose. The objectives of the present study was to explore the utility of plants among rural peoples for various use especially for Boil, Burn, and for Wounds in nearby the areas of Bilaspur (C. G.) in Central part of Chhattisgarh.

Materials and Methods

Information related to the use of the plant species were collected in 2011-2012 near the villages of Bilaspur (C. G.). The information was collected by general conversation with knowledgeable persons of the area and plants local name, used parts, propagation etc was known from him. Other scientific plant related information was gained by using literatures.

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Results and Discussion

A variety of plants species are used for different disorders in rural

areas. Particularly the plants which are used for boil, burn and for wound are documented/ listed in (Table 1). Table 2 showing family wise number of the plants. Table 3 and Figure 1 is for Habit variation.

S.No.	Botanical Name	Common/Name	Family	Habit	Parts Used	Propagation
1.	<i>Adhatoda vasica</i>	Vasaka	Acanthaceae	Shrub	Leaf, soft stem	Stem cutting
2.	<i>Aegle marmelos</i>	Bael	Rutaceae	Tree	Leaf, bark, Fruit	Seed
3.	<i>Ageratum conyzoids</i>	White weed	Asteraceae	Herb	Leaf	Seed
4.	<i>Allium cepa</i>	Onion	Liliaceae	Herb	Bulb	Bulb
5.	<i>Aloe vera</i>	Gwarpatha	Liliaceae	Herb	Leaf	Bud
6.	<i>Annona squamosa</i>	Sitaphal	Annonaceae	Shrub	Leaf, Fruit	Seed
7.	<i>Anthocephalus cadamba</i>	Kadamb	Rubiaceae	Tree	Bark	Seed
8.	<i>Argemone maxicana</i>	Pili kateri	Papavaraceae	Herb (Spiny)	Leaf	Seed
9.	<i>Azadiracta indica</i>	Neem	Meliaceae	Tree	Leaf, Oil	Seed
10.	<i>Blumea lacera</i>	Hul hul	Asteraceae	Herb	Leaf	Seed
11.	<i>Boerhavia diffusa</i>	punarnava	Nyctaginaceae	Herb	Leaf	Seed
12.	<i>Butea monosperma</i>	Palas	Fabaceae	Tree	Bark	Seed
13.	<i>Calotropis gigantea</i>	AK	Asclepiodaceae	Shrub	Leaf, Stem	Seed
14.	<i>Canna indica</i>	Baijanti	Cannaceae	Herb	Stem	Rhizome
15.	<i>Carica papaya</i>	Papita	Caricaceae	Herb	Leaf, Fruit	Seed
16.	<i>Cassia alata</i>		Fabaceae	Shrub	Leaf	Seed
17.	<i>Cassia tora</i>	Charota	fabaceae	Herb	Leaf	Seed
18.	<i>Centella asiatica</i>	Madukparni	apiaceae	Herb	Leaf	Stem cutting
19.	<i>Chenopodium album</i>	Bathua	Chenopodiaceae	Herb	Leaf	Seed
20.	<i>Cleome viscosa</i>		Cleomaceae	Herb	Leaf	Seed
21.	<i>Clitoria ternatea</i>	Butterfly flower	Fabaceae	Herb	Leaf	Seed
22.	<i>Costus speciosus</i>	Keu kand	Zinziberaceae	Herb	Leaf, Rhizome	Rhizome
23.	<i>Curcuma longa</i>	Haldi	Zinziberaceae	Herb	Rhizome	Rhizome
24.	<i>Daucus carota</i>	Gajar	Apiaceae	Herb	Root	Seed
25.	<i>Diospyrus melanoxylon</i>	Tendu	Ebenaceae	Tree	Fruit	Seed
26.	<i>Eclipta alba</i>	Bhringraj	Asteraceae	Herb	Leaf	Seed
27.	<i>Euphorbia hirta</i>	Dudhi	Euphorbiaceae	Herb	Leaf, Stem	Seed
28.	<i>Ficus bengalensis</i>	bargad	ficaceae	tree	Leaf, Bark	Seed
29.	<i>Gloriosa superba</i>	Kalihari	Liliaceae	Herb	Tuber	Tuber
30.	<i>Helianthus annuus</i>	Sun flower	asteraceae	Herb	oil	Seed
31.	<i>Heliotropium indicum</i>	Indian Turnsole	Boraginaceae	Herb	Leaf	Seed
32.	<i>Hyptis suaveolens</i>	Van Tulsi	Lamiaceae	Herb	Leaf	Seed
33.	<i>Ixora coccinea</i>	Ixora	Rubiaceae	Shrub	Flower	Stem cutting
34.	<i>Lawsonia inermis</i>	Mehandi	Lythraceae	Shrub	Leaf	Seed
35.	<i>Mentha viridis</i>	Podina	Lamiaceae	Herb	Leaf	Stem cutting
36.	<i>Mimosa pudica</i>	Chui-mui	fabaceae	Herb	Leaf	Seed
37.	<i>Moringa oleifera</i>	Munga	Moringaceae	Tree	Leaf, Bark	Seed
38.	<i>Murraya paniculata</i>	Meetha neem	Rutaceae	Shrub	Leaf	Seed
39.	<i>Musa paradisiaca</i>	Kela	Musaceae	Herb	Stem, Fruit	Rhizome
40.	<i>Nerium indicum</i>	Kaner	apocynaceae	Shrub	Leaf	Seed/Stem cutting
41.	<i>Pongamoea pinnata</i>	Karanj	Fabaceae	Tree	Bark	Seed
42.	<i>Pothos scandens</i>	Money plant	Araceae	Herb	Leaf	Stem cutting
43.	<i>Psidium guava</i>	Amrud	Myrtaceae	Tree	Leaf, Fruit	Seed
44.	<i>Ptephrosia perpuria</i>	Wild indigo	Fabaceae	Herb	Leaf	Seed
45.	<i>Punica granatum</i>	Anar	Punicaceae	Shrub	Bark	Seed
46.	<i>Rosa indica</i>	Rose	Rosaceae	Shrub	Leaf	Stem cutting
47.	<i>Sesamum indicum</i>	Tilli	Pedaliaceae	Herb	oil	Seed
48.	<i>Sida rhombifolia</i>	Arrow leaf sida	Malvaceae	Herb	Leaf	Seed
49.	<i>Solanum indicum</i>	Potato	Solanaceae	Herb	Tuber	Seed
50.	<i>Solanum xanthocarpum</i>	Bhatkatia	Solanaceae	Herb (Spiny)	fruit	Seed
51.	<i>Syzygium cumini</i>	Jamun	Myrtaceae	Tree	Leaf, Bark	Seed
52.	<i>Tagetes patula</i>	Chandani genda	Asteraceae	Herb	Leaf	Seed
53.	<i>Terminalia chebula</i>	Harra	Combrataceae	Tree	Fruit	Seed
54.	<i>Tridax procumbens</i>	Coat button	Asteraceae	Herb	Leaf	Seed
55.	<i>Vitex negundo</i>	Negur	Verbanaceae	Shrub	Leaf	Stem cutting

Table 1: Plant species useful for boil, burn and for wounds.

S. No.	Family	No. of plant species	Percentage
1.	Acanthaceae	1	1.82
2.	Annonaceae	1	1.82
3.	Apiaceae	2	3.64
4.	Apocynaceae	1	1.82
5.	Araceae	1	1.82
6.	Asclepiodaceae	1	1.82
7.	Asteraceae	6	10.90
8.	Boraginaceae	1	1.82
9.	Cannaceae	1	1.82
10.	Caricaceae	1	1.82
11.	Chenopodiaceae	1	1.82
12.	Cleomaceae	1	1.82
13.	Combrataceae	1	1.82
14.	Ebenaceae	1	1.82
15.	Euphorbiaceae	1	1.82
16.	Fabaceae	7	1.82
17.	Ficaceae	1	1.82
18.	Lamiaceae	2	3.64
19.	Liliaceae	3	5.45
20.	Lythraceae	1	1.82
21.	Malvaceae	1	1.82
22.	Meliaceae	1	1.82
23.	Moringaceae	1	1.82
24.	Musaceae	1	1.82
25.	Myrtaceae	2	3.64
26.	Nyctaginaceae	1	1.82
27.	Papavaraceae	1	1.82
28.	Pedaliaceae	1	1.82
29.	Punicaceae	1	1.82
30.	Rosaceae	1	1.82
31.	Rubiaceae	2	3.64
32.	Rutaceae	2	3.64
33.	Solanaceae	2	3.64
34.	Verbanaceae	1	1.82
35.	Zinziberaceae	2	3.64
TOTAL		55	

Table 2: Plant species useful for boil, burn and for wounds.

S. No.	Habit	Number of the Plants	Percentage
1.	Herb	31	56.36
2.	Herb (Spiny)	02	3.64
3.	Shrub	11	20.00
4.	Tree	11	20.00
TOTAL		55	

Table 3: Habit of the Plant species.

Table 4 and Figure 2 plant parts used and Table 5 and Figure 3 is for propagation mode of the plants. A total of 55 species of plants belonging 35 families were recorded.

On the basis of habit 32 herbs 11 shrubs and 12 trees were found to be useful for this purpose. As used plant parts maximum leaf part is recorded for the above purpose. Propagation method maximum 72.72% recorded for Seeds. Plants were recorded as their external use in treatment. Recorded plant species were of varied families like one members from each families like Acanthaceae , Annonaceae , Apocynaceae, Araceae, Asclepiodaceae, Boraginaceae, Cannaceae, Caricaceae, Chenopodiaceae, Cleomaceae, Combrataceae, Ebenaceae, Euphorbiaceae, Ficaceae, Lythraceae, Malvaceae, Meliaceae, Moringaceae, Musaceae, Nyctaginaceae, Papavaraceae, Pedaliaceae,

Punicaceae, Rosaceae, Verbanaceae. Two members from Apiaceae, Lamiaceae, Myrtaceae, Rubiaceae, Rutaceae, Solanaceae, Zinziberaceae. Three members from Liliaceae were recorded and six members from family Asteraceae were recorded.

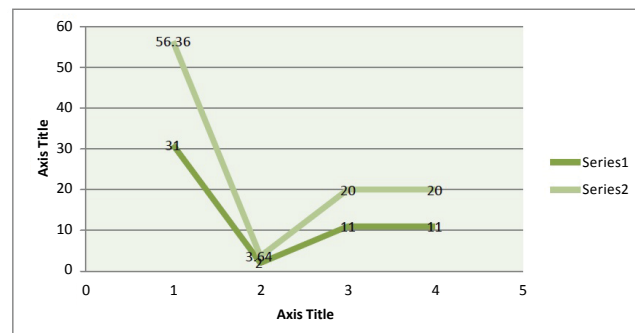


Figure 1: Graphical representation of Habit Plant species.

S. No.	Parts Used	Number of the Plants	Percentage
1.	Bark	4	7.27
2.	Bulb	1	1.82
3.	Flower	1	1.82
4.	Fruit	3	5.45
5.	Leaf	26	47.27
6.	Leaf, Bark	3	5.45
7.	Leaf, bark, Fruit	1	1.82
8.	Leaf, Fruit	3	5.45
9.	Leaf, Rhizome	1	1.82
10.	Leaf, Stem	3	5.45
11.	Leaf. Oil	1	1.82
12.	oil	2	3.64
13.	Rhizome	1	1.82
14.	Root	1	1.82
15.	Stem	1	1.82
16.	Stem, Fruit	1	1.82
17.	Tuber	2	3.64
TOTAL		55	

Table 4: Plant Parts used.

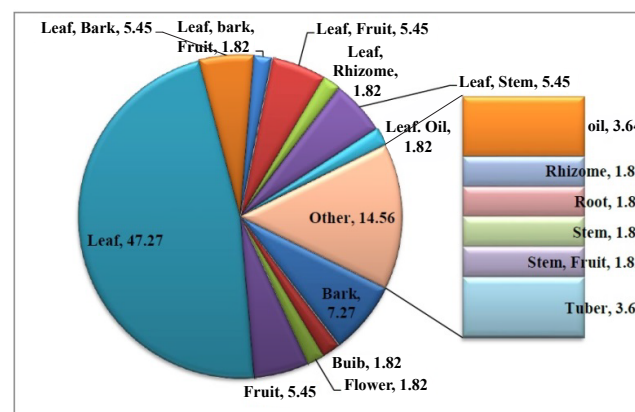


Figure 2: Graphical representation of Plant Parts used.

S. No.	Propagation	No. of plants	Percentage
1.	Bud	1	1.82
2.	Bulb	1	1.82
3.	Rhizome	4	7.27
4.	Seed	40	72.72
5.	Seed/Stem cutting	1	1.82
6.	Stem cutting	7	12.72
7.	Tuber	1	1.82
TOTAL		55	

Table 5: Propagation mode of the Plants.

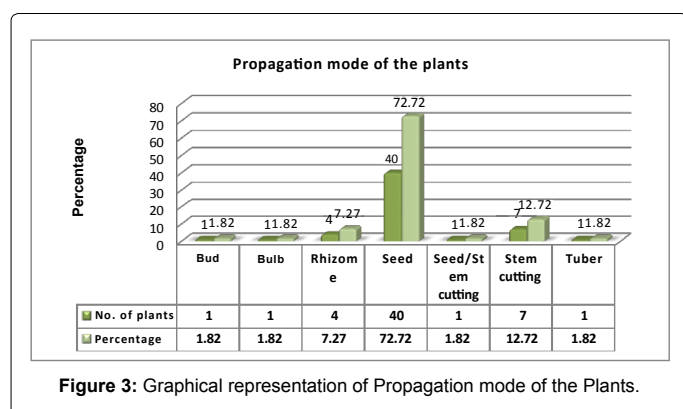


Figure 3: Graphical representation of Propagation mode of the Plants.

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