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# Ethno-Botanical Survey on Traditional and Medicinal Uses of Leguminosae Family at Rajnandgaon and Balod District of Chhattisgarh

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**Abstract:** Leguminosae is one of the largest family with three sub-families and it has a great ethno-botanical and ethno-medicinal importance in indigenous and urban communities throughout the Chhattisgarh. Leguminous plants are widely used for many purposes by peoples of rural areas and it includes many important cultivated economic food crops. The research work was initiated to get information and reports the traditional and medicinal uses of the family leguminosae by tribal peoples of Chhattisgarh. The paper also deals with an account of endemic and rare plants of Leguminosae existence of Chhattisgarh. In our field survey we got 3 rare plants species *Alysicarpus bupleurifolicus*, *Flemingia stricta*, and *Zornia gibbosa* belonging to Papilionatae sub-family. They had highly medicinal properties that's why their more exploitation done by tribal people and get become a rare plant species which is also included in BSI report of endemic and rare plants of Chhattisgarh 2004. A total of 63 medicinal plant species are used by the local health healer for the treatment of different disease. The medicinal plants used by the traditional users of Rajnandgaon and Balod district are arranged alphabetically followed by botanical name, common name, flowering time, habit and their uses.

**Keywords:** Ethno-botany, Traditional practitioners, Medicinal, Phenology, Chhattisgarh

## I. INTRODUCTION

According to the Royal Botanical Garden Fabaceae is the third largest family of flowering plants behind Orchidaceae and Asteraceae, with 730 genera and over 19,400 species. The largest genera are *Astragalus* with more than 2,000 species, *Acacia* with more than 900 species, and *Indigofera* with around 700 species. Other large genera include *Crotalaria* with 600 species and *Mimosa* with 500 species. The family exhibits greatest diversity in the tropics and sub-tropics which is divided into three subfamilies: Papilionatae, Caesalpinoidae and Mimosoidae. The sub-family Papilionatae is the largest group of legume other than 2 sub-families which consisting of about 475 genera and 14,000 species grouped in 14 tribes. The sub-family Caesalpinoidae is a heterogenous group of plants with about 160 genera and some 2000 species and the sub-family Mimosoidae have 82 genera and more than 3200 species. The sub-family Papilionatae constitutes 71% of total legume flora while Caesalpinoidae and Mimosoidae constitute 14.6% and 14.4% respectively.

The Leguminosae generally called as the legume, pea, or bean family, are a large and economically important family of flowering plants. It includes trees, shrubs, climber and herbaceous plants with perennials or annuals habit. Those are easily identified by their legume fruits and as well as their compound, stipulated leaves.

Leguminosae includes many useful plants, such as crops, vegetables, timber, ornamentals, and medicinal plants, and are also important as fodder and green manure. It is the second most important crop family than the Poaceae which grown as economic crops in the worldwide and are also important at the local scale. Many ethnobotanical studies in Chhattisgarh have been demonstrated that legumes have always had more uses and used species than other plant families.

Chhattisgarh one of the tribal states of India in which most of the tribes are concentrated in the northern and southern part of the state. Most of the Chhattisgarh's tribal population and primarily depends upon agriculture, forestry, cottage industries, hunting and fishing for their subsistence. The state is rich of various culture, traditions, and heritages along with the medicinal and herbal plants. Chhattisgarh is the center of production and collection of forest goods that is an important for financial self-dependence of tribal peoples. Some practice shifting cultivation even today other than collecting forest produces for their all problems, needs, livelihoods and treatment of the disease by natural resources present around them.

Traditional knowledge of tribal healers on medicinal plants are not only important for conservation of cultural traditions and biodiversity but also for community health care and drug development by the local people. The indigenous knowledge on medicinal plants appears when humans started and learned how to use the traditional knowledge on medicinal plants.

Unfortunately, many ethnobotanical studies in Chhattisgarh are focused only on single ethnic groups and many are unpublished. Therefore, information about legume uses in Chhattisgarh remains incomplete. Because legumes are so important at all scales, it is important to document their uses. Considering the global importance of legumes, in combination with the limited research into their local uses among ethnic groups, we expect many unreported local uses of legumes and that they may be underutilized. New studies that focus on legumes and on discovering their local uses may expose their overall usefulness. The present study is an attempt to documents on different plant species of leguminosae used by tribal people for local health healers to cure different ailments.

## II. MATERIALS AND METHODS

The present research work was carried out in 2 district of Chhattisgarh at particularly Mohla-Manpur and Doundi-lohara block of Rajnandgaon and Balod district respectively. Chhattisgarh was separate out from Madhya Pradesh since year 2000. The state falls under East Deccan physiographic zone and can be divided into three agro-climatic zones viz., The Chhattisgarh Plains, The Northern Hills of Chhattisgarh and Bastar Plateau.

Chhattisgarh has a tropical hot and humid climate. The average annual rainfall varies from about 1,100 mm to about 1,700 mm and the average annual temperature ranges between 11°C to 47°C. Out of 05 types of Soil of Chhattisgarh, red-yellow soil covered 55%, red sandy soil covered 30% and remaining 15% of the states expanse covered by red loam soil, black soil & laterite soil.

The typical climate of the state has divided into three distinct seasons: Summer (March-June), Rainy (July-October) and Winter (November-February). The months of May and June are generally the hottest while the coolest months are December and January. The south-western monsoon brings rainfall to the area during the months of June to September.

### A. Study Area

1) *Rajnandgaon District*: It is situated in the western part of Chhattisgarh state. The district lies between 20° 70' to 22° 29' N latitude and 80° 23' to 81° 29' E longitude and covering an area of 8222 km<sup>2</sup>. The district is bounded by Kabirdham district in north, Durg district in east, Kanker district in south, Gadchiroli & Bhandara district of Maharastra state and Balaghat district of M.P state in the west. The average rainfall is 1277 mm. The "Shivnath river" originates from "Panabaras hill" of Rajnandgaon district. Mohla-Manpur falls in Rajnandgaon district and central region of Chhattisgarh. Manpur-Mohla block is the interior most blocks situated around 100 km from Rajnandgaon district and is naxalite affected area of the district.

2) *Balod District*: It is located in the south north center of Chhattisgarh and lies between 20° 23' to 21° 03' N latitude and 80° 48' to 82° 30' E longitude. Total area of Balod district is 3527 km<sup>2</sup>. It is surrounded by Durg district in the north, Rajnandgaon district in the west, Dhamtari district in the east and Kanker district in the south. The average rainfall is 1142 mm. The "Tandula river" runs through the Balod district. Doundi-lohara is located in the west region from Balod district at 20 km.

### B. Field Survey

Surveys were conducted in different tribal exhibiting localities of Chhattisgarh. Various area have been selected for study and collection of plants species in wild (Forest), agriculture land in Mohala-Manpur and Doundi Lohara. The main aim of the survey was to collect the information on leguminous plants. We also captured photographs and collected specimen of plants from the different region of Mohala-Manpur and Doundi-Lohara. The identification was also based on literature study. The important literature was also consulted to verify the collected information (Haines, 1921-25, Verma et. al., 1985, Kirtikar & Basu, 1991, Hooker, J. D., 1897). Valuable information regarding medicinal uses was collected on the basis of queries with experienced people of various communities, local healers (Vaidya) and old members and also consulting peoples.

## III. RESULTS AND DISCUSSION

Leguminous plants are economically as well as ecologically important plants due to presence of Nitrogen fixing bacteria in their root nodules which increases the soil fertility. Plants provided us many things such as pulses, medicine, edible oils, and also green manure. Its also source of other forest produces as timber, dye, gum, non-wood forest product.

During the survey total 83 species were collected from Rajnandgaon and Balod district of Chhattisgarh. Out of them, 42 herbs, 28 trees, 7 shrubs and 6 climbers are categorized.

Most recorded plants are herbs and trees. Out of 83 plants, sub-family Papilionatae contains maximum 53 plants, Caesalpinioideae contains 16 plants and Mimosoideae contain 14 plants. Herbs food crops and Green manure are mostly found belonging to sub family Papilionatae. Plants are collected from different areas according to their habitat and suitable climatic condition. We find out that the 47 wild and 44 cultivated plants species. All plant species have different flowering period were showed in (Table 1a, 1b & 1c). The genus *Acacia* has the highest number of species (5 species) followed by *Senna* and *Crotalaria* with 4 species. The genera i.e., *Bauhinia*, *Alysicarpus*, *Desmodium* and *Phaseolus* having 3 species whereas genera i.e., *Caesalpinia*, *Albizia*, *Prosopis*, *Aeschynomene*, *Glycine*, *Indigofera* and *Lathyrus* having 2 species. There are 41 genera represented by single species.

Table 1a: Sub-family - Papilionatae.

S. No	Botanical name	Common name	Flowering time	Habit	Uses Pattern
1	<i>Abrus precatorius</i> L.	Rosary pea	Oct-nov	Climber/W	M
2	<i>Aeschynomene aspera</i> L.	Laugauni	Sep-oct	Herb/W	M
3	<i>Aeschynomene indica</i> Linn.	Phulan	Sep-oct	Herb/W	M
4	<i>Alysicarpus bupleurifolius</i> (L.) DC.	Sweet alys	Sep-oct	Herb/W	M
5	<i>Alysicarpus monilifer</i> (L) DC.	Juhi ghas	Oct-nov	Herb/W	M
6	<i>Alysicarpus vaginalis</i> DC.	Sauri	Oct-nov	Herb/W	FD and GM
7	<i>Arachis hypogaea</i> L.	Mungphalli	June-aug.	Herb/C	M and F
8	<i>Butea monosperma</i> (Lam.) Taub.	Palas	Feb-march	Tree/C/W	M,FD,T,D,G, GM
9	<i>Cajanus cajan</i> (L.) Phillips.	Arhar	Nov – dec.	Shrub/C	M,F and GM
10	<i>Cicer arietinum</i> L.	Chana	Feb.-April	Herb/C	M,F and FD
11	<i>Clitoria ternatea</i> L.	Aprajita	Jan. – Dec.	Climber/C	M
12	<i>Crotalaria medicaginea</i> Lam.	Gulabi	Nov-dec	Herb/C	M
13	<i>Crotalaria spectabilis</i> L.	Sanni	Nov-dec	Herb/W	M and F
14	<i>Crotalaria albida</i> Heyne ex Roth	Ban-methi	Nov-dec	Herb/W	M
15	<i>Crotalaria rotundifolia</i> J.F.Gmel.	Devil bean	Nov-dec	Herb/W	M and F
16	<i>Cyamopsis tetragonoloba</i> (L.)	Gavarphali	Oct-nov	Herb/C	M,F,G and GM
17	<i>Dalbergia sissoo</i> Roxb.	Shisham	March-May	Tree/C/W	M,F,FD,T,G, GM
18	<i>Desmodium gangeticum</i> (L.)DC.	Salperni	May- oct	Herb/W	M
19	<i>Desmodium paniculatum</i> (L.) DC.	Tickclover	Feb-march	Herb/W/C	FD
20	<i>Desmodium triflorum</i> (L.) DC.	Motha	Aug-sep	Herb/W	M
21	<i>Dolichos lablab</i> L.	Sem	Nov-dec	Climber/C	F,FD and GM
22	<i>Erythrina variegata</i> Lam.	Rakta madar	Jan-feb	Tree/C	M
23	<i>Flemingia stricta</i> Roxb.	Erect flemingia	Jan-feb	Herb/W/C	M and F
24	<i>Gliricidia sepium</i> (Jacq.) Steud	Giripushpa	Jan-feb	Tree/ C	FD and GM
25	<i>Glycine max</i> Merr.	Soyabean	Nov-dec	Herb/C	M,F and FD
26	<i>Glycine soja</i> Siebold & Zucc.	Wild soyabean	Feb-march	Climber/W	M and F
27	<i>Glycyrrhiza glabra</i> L.	Mulethi	Jul-aug	Shrub/W/C	M
28	<i>Indigofera cassioides</i> Rottl ex DC.	Ghirgholi	Sep-oct	Herb/C	M,F and FD
29	<i>Indigofera linnaei</i> Ali.	Neel	Oct -march	Herb/W	M and GM
30	<i>Lathyrus odoratus</i> L.	Batari	Jan	Herb/ C	M and F
31	<i>Lathyrus sativus</i> L.	Lakhdi	Jan-feb	Herb/ C	F,FD and GM
32	<i>Lens esculenta</i> Moench.	Masur	Feb-march	Herb/C	F and FD
33	<i>Macrotyloma uniflorum</i> (Lam.)	Kulthi	Nov-dec	Herb/ C	M and F
34	<i>Medicago rigidula</i> (L.)all	Chanori bhaji	Jan-feb	Herb/W	F
35	<i>Melilotus albus</i> Medik.	Ban Methi	Jan-feb	Herb/W	F and FD
36	<i>Mucuna pruriens</i> (L.)DC	Kemachh	Jan – feb	Climber/W	M and F
37	<i>Phaseolus lunatus</i> L.	Lima bean	Jan-feb	Herb/C	M,F and FD
38	<i>Phaseolus trilobus</i> Ait.	Vanmung	Nov dec	Herb/C/W	M,F and FD
39	<i>Phaseolus vulgaris</i> L.	Common bean	June – nov	Herb/C	F
40	<i>Pisum sativum</i> L.	Matar	Jan.-March	Herb/C	F,FD and GM
41	<i>Pongamia pinnata</i> L. (Panigrahi)	Karanj	Jan-feb	Tree/C/W	M
42	<i>Psophocarpus tetragonolobus</i> (L.)	Winged bean	Feb-april	Herb/C	F

43	<i>Psoralea corylifolia</i> L.	Babchi	Aug-dec	Herb/W	M
44	<i>Pterocarpus marsupium</i> Roxb.	Beeja	Nov	Tree/W	M,T and G
45	<i>Rhynchosia minima</i> (L.) DC	Kulata	Aug-jan	Climber/w	M and F
46	<i>Smithia hirsute</i> Aiton	Kawla	Sep-oct	Herb/W	M,F and GM
47	<i>Tephrosia purpurea</i> (L.)Pers.	Sarphonk	Oct-nov	Herb/W	M and GM
48	<i>Trigonella foenum-graecum</i> L.	Methi	Jan-feb	Herb/C	M,F and FD
49	<i>Vicia sativa</i> L.	Jillo	Jan-feb	Herb/C	F,FD and GM
50	<i>Vigna anguiculata</i> (L.) Walp.	Barbati	Nov-dec	Herb/C	F and FD
51	<i>Vigna mungo</i> (L.)Hepper	Urad	Jan-feb	Herb/C	M and F
52	<i>Vigna radiata</i> (L.)R. Wilczek	Mung	Dec-jan	Herb/C	M and F
53	<i>Zornia gibbosa</i> Span.	Neel mari	Aug-sep	Herb/W	M

Table 1b: Sub-family - Caesalpiinoideae.

S. No	Botanical name	Common name	Flowering time	Habit	Uses Pattern
1	<i>Bauhinia acuminata</i> L.	white Kachnar	Feb-march	Tree/W	M,F
2	<i>Bauhinia purpurea</i> L.	Gulabi Kachnar	Sep-nov	Tree/W	M,F and D
3	<i>Bauhinia variegata</i> L.	Safed Kachnar	Feb-april	Tree/W	M and F
4	<i>Caesalpinia crista</i> L.	Kanta Karanja	Aug-april	Shrub/C	M
5	<i>Caesalpinia pulcherrima</i> (L) Sw.	Dwarf gulmohar	Jan. – dec.	Shrub/W	M
6	<i>Cassia fistula</i> L.	Amaltash	March-april	Tree/W	M and F
7	<i>Delonix regia</i> (Boj. Ex Hook)	Rafin Gulmohar	March-april	Tree/W	M
8	<i>Hardwickia binata</i> Roxb.	Anjan	July-sep	Tree/W	M and T
9	<i>Parkinsonia aculeata</i> Linn.	Kikar	Oct-march	Tree/W	M
10	<i>Peltophorum pterocarpum</i> (DC.)	Peela Gulmohar	Feb-april	Tree/C	M,T and D
11	<i>Saraca asoca</i> (Roxb.)de Wilde	Ashok	Feb-april	Tree/W/C	M
12	<i>Senna angustifolia</i> Vahl.	Senna	Aug-sep	Shrub/W	M
13	<i>Senna occidentalis</i> L.	Kasondi	Jan. – dec.	Herb/W	M and F
14	<i>Senna siamea</i> Lam.	Kassod	Aug-may	Tree/C	F and T
15	<i>Senna tora</i> L.	Charota	Oct-nov	Herb/W	M,F, and D
16	<i>Tamarindus indica</i> L.	Imli	June-july	Tree/W	M,E ,T and D



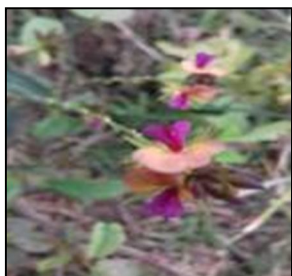

















Table 1c: Sub-family - Mimosoideae.





S. No	Botanical name	Common name	Flowering time	Habit	Uses Pattern
1	<i>Acacia arabica</i> (L.)Willd. Ex Del.	Babool	July-dec	Tree/W	M,FD,G and T
2	<i>Acacia auriculiformis</i> A.Cunn.	Australian babul	March-dec	Tree/C	T
3	<i>Acacia catechu</i> (L.f.) Willd.	Khair	July-aug	Tree/C	M,FD,T and D
4	<i>Acacia leucophloea</i> (Roxb.)Willd.	Jand	July-nov	Tree/C	M,FD and T
5	<i>Acacia mangium</i> A.Cunn	Mangium	Oct-nov	Tree/C	T
6	<i>Albizia julibrissin</i> Durazz.	Pink silk	March-april	Tree/C	M and FD
7	<i>Albizia lebbek</i> (L.)	Siris	March-april	Tree/C	M,FD and T
8	<i>Calliandra haematocephala</i> Hassk.	Red powder puff	Aug-sep	Shrub/C	M
9	<i>Leucaena leucocephala</i> (Lam.)	Subabool	Jan-feb	Tree/C	M,T,D and GM
10	<i>Mimosa pudica</i> L.	Lajwanti	Sep-oct	Herb/W	M and FD
11	<i>Pithecolobium dulce</i> (Roxb.)	Gangaimali	Jan-feb	Tree/W	M and F
12	<i>Prosopis cineraria</i> (L.)	Druce Shami	June-july	Tree/C	M,F and FD
13	<i>Prosopis juliflora</i> (Sw.) DC.	Kabuli kikar	Aug-may	Shrub/W	M,F,D and G
14	<i>Xylocarpus xylocarpa</i> (Roxb.) Taub.	Jambu	March-april	Tree/W	M,E and GM





ABBREVIATION – M=Medicinal, F=Food, FD=Fodder, D=Dye, T=Tree, G=Gum,





GM=Green Manure, C= Cultivated and W= Wild





Photoplate1. E-Photoes of Papilionatae plants.





			
<b>1. <i>Abrus precatorius</i></b>	<b>2. <i>Aeschynomene indica</i></b>	<b>3. <i>Alysicarpus bupleurifolius</i></b>	<b>4. <i>Alysicarpus monilifer</i></b>
			
<b>5. <i>Arachis hypogaea</i></b>	<b>6. <i>Butea monosperma</i></b>	<b>7. <i>Cajanus cajan</i></b>	<b>8. <i>Cicer arietinum</i></b>
			
<b>9. <i>Clitoria ternatea</i></b>	<b>10. <i>Crotalaria spectabilis</i></b>	<b>11. <i>Crotalaria rotundifolia</i></b>	<b>12. <i>Dalbergia sissoo</i></b>
			
<b>13. <i>Desmodium paniculatum</i></b>	<b>14. <i>Desmodium triflorum</i></b>	<b>15. <i>Dolichos lablab</i></b>	<b>16. <i>Erythrina variegata</i></b>
			
<b>17. <i>Flemingia stricta</i></b>	<b>18. <i>Gliricidia sepium</i></b>	<b>19. <i>Glycine soja</i></b>	<b>20. <i>Indigofera linnaei</i></b>

			
<i>21. Lathyrus odoratus</i>	<i>22. Lathyrus sativus</i>	<i>23. Macrotyloma uniflorum</i>	<i>24. Medicago rigidula</i>

			
<i>25. Melilotus albus</i>	<i>26. Mucuna pruriens</i>	<i>27. Phaseolus lunatus</i>	<i>28. Phaseolus trilobus</i>

			
<i>29. Pisum sativum</i>	<i>30. Pongamia glabra</i>	<i>31. Psophocarpus tetragonolobus</i>	<i>32. Psoralea corylifolia</i>

			
<i>33. Smithia hirsute</i>	<i>34. Tephrosia purpurea</i>	<i>35. Trigonella foenum-graecum</i>	<i>36. Vicia sativa</i>

			
<i>37. Vigna anguiculata</i>	<i>38. Vigna mungo</i>	<i>39. Vigna radiata</i>	<i>40. Zornia gibbosa</i>

Photoplate 2. E-Photoes of Caesalpinioideae plants.

<b>1. <i>Bauhinia purpurea</i></b>	<b>2. <i>Bauhinia variegata</i></b>	<b>3. <i>Caesalpinia pulcherrima</i></b>	<b>4. <i>Cassia fistula</i></b>
<b>5. <i>Delonix regia</i></b>	<b>6. <i>Senna occidentalis</i></b>	<b>7. <i>Senna tora</i></b>	<b>8. <i>Senna siamea</i></b>
<b>9. <i>Parkinsonia aculeata</i></b>	<b>10. <i>Peltophorum pterocarpum</i></b>	<b>11. <i>Saraca asoca</i></b>	<b>12. <i>Tamarindus indica</i></b>

Photoplate 3. E-Photoes of Mimosoideae plants.

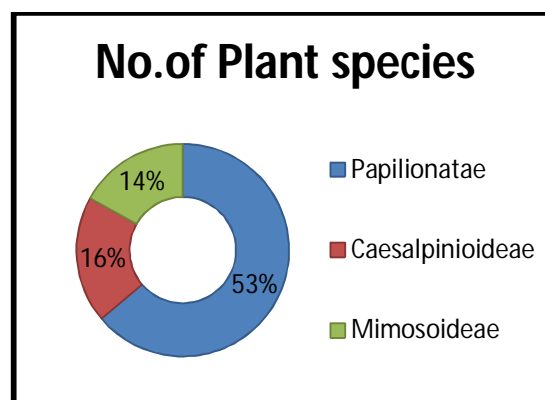
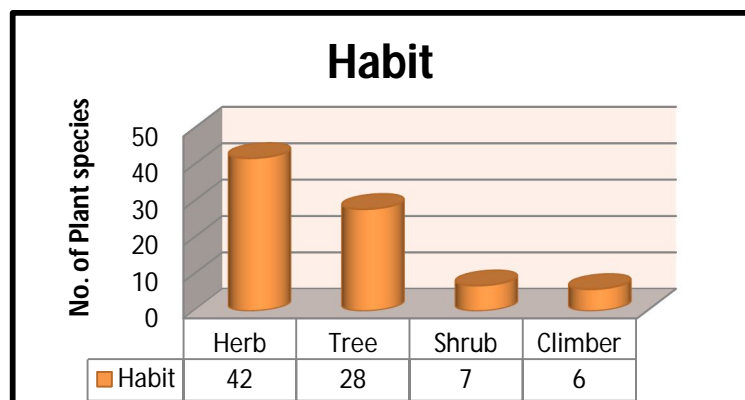
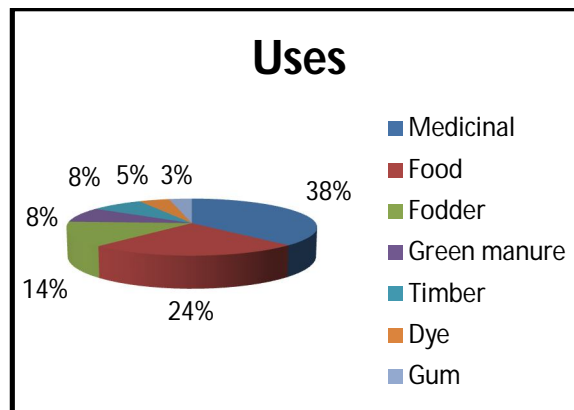
<b>1. <i>Acacia arabica</i></b>	<b>2. <i>Acacia auriculiformis</i></b>	<b>3. <i>Acacia catechu</i></b>	<b>4. <i>Acacia mangium</i></b>
<b>5. <i>Albizzia julibrissin</i></b>	<b>6. <i>Mimosa pudica</i></b>	<b>7. <i>Calliandra haematocephala</i></b>	<b>8. <i>Leucaena leucocephala</i></b>



The results showed that maximum 67 species used as Medicine. Other 43 species as Food, 25 species used as Fodder, 15 species used as Green manure, 14 species used as Timber, 08 species used as Dye and 6 species used as Gum were showed in (Table 1, 2).

Table 2: Uses of Leguminous plant in the study area.

Sl. No	Uses	No. of plants
1.	Medicinal	67
2.	Food	43
3.	Fodder	25
4.	Green manure	15
5.	Timber	14
6.	Dye	08
7.	Gum	06



Since ancient time in an indigenous system leguminous plants are used as medicine. Therefore an Ethno-botanical survey was conducted to identify the plants used in the treatment and prevention of many ailments. The traditional knowledge of the tribal communities is passed orally from generation to generation. Mostly plants have medicinal importance also mention in ancient Indian medicine literature. *Flemingia stricta* used in treatment of Polio and goiter, *Zornia gibbosa* used in the treatment of inflammation and dysentery, *Abrus precatorius*, *Butea monosperma*, *Clitoria ternatea*, *Dalbergia sissoo*, *Acacia arabica*, *Saraca asoca* and *Mimosa pudica* used in gynecological problems. *Acacia catechu* used in treatment of Toothache, cough, cold, and stomach pain. *Bauhinia purpurea* used in Ulcer, *Delonix regia* used in Dismenorrhoea, *Cassia fistula* used in Tonsils, cough, constipation, *Pongamia pinnata* used in skin problems, *Caesalpinia pulcherrima* used in diarrhea, dysentery and internally in skin diseases, *Desmodium triflorum* and *Glycyrrhiza glabra* used in galactagogue and *Tamarindus indica* used in Burning sensation and heart disease.

Wild and cultivated edible plants constitute an important source of dietary supplement of the tribal communities and balancing the deficiencies of cereal protein (Poaceae). In legume a seed generally has highest protein compounds followed by carbohydrate and fat. *Cicer arietinum*, *Lathyrus odoratus*, *Lathyrus sativus*, *Medicago rigidula*, *Melilotus albus*, *Trigonella foenum-graecum*, *Vicia sativa*, *Vigna anguiculata*, *Vigna mungo*, *Bauhinia variegata*, *Senna tora*, *Tamarindus indica* etc. used as leafy vegetables. Pulses are high in vitamin B complex, protein and minerals. Many types of pulses i.e., *Cajanus cajan*, *Cicer arietinum*, *Dolichos lablab*, *Lathyrus odoratus*, *Lathyrus sativus*, *Lens esculenta*, *Macrotyloma uniflorum*, *Phaseolus lunatus*, *Phaseolus vulgaris*, *Pisum sativum*, *Vicia sativa*, *Vigna anguiculata*, *Vigna mungo*, *Vigna radiata* etc.; fruits i.e., *Tamarindus indica*, *Pithecellobium dulce* and edible oil of *Arachis hypogaea* are used as food in tribal areas since centuries.

Fodder legumes also are grown as animal feed. Some major fodder legumes of the Study area includes *Acacia arabica*, *Albizia julibrissin*, *Prosopis cineraria*, *Mimosa pudica*, *Cicer arietinum*, *Dolichos lablab*, *Gliricidia sepium*, *Glycine max*, *Indigofera cassioides*, *Melilotus albus* and *Phaseolus trilobus* are the main source of fodder production for Animals.

Species of *Alysicarpus vaginalis*, *Cajanus cajan*, *Cyamopsis tetragonoloba*, *Dolichos lablab*, *Gliricidia sepium*, *Indigofera limmaei*, *Lathyrus sativus* and *Xylia xylocarpa* are used as green manure. Few examples of Timber plants found in study area are - *Acacia auriculiformis*, *Acacia mangium*, *Albizia lebbeck*, *Dalbergia sissoo*, *Pterocarpus marsupium*, *Hardwickia binata* and *Peltophorum pterocarpum*. Species of *Acacia catechu*, *Butea monosperma*, *Leucaena leucocephala*, *Prosopis juliflora*, *Senna tora* and *Tamarindus indica* are used as dye. Species of *Butea monosperma*, *Cyamopsis tetragonoloba*, *Dalbergia sissoo*, *Pterocarpus marsupium*, *Acacia arabica* and *Prosopis juliflora* used as gum.

Similar work in Raipur district is done by Dewangan and Acharya (2017) on Family Leguminosae in his work in which he has recorded 88 plants of different habits and habitats in the area based on diversity. Tiwari and Chandrol (2012) and Sharma et.al. (2016) also studied indigenous medicinal herbs used by tribals of Chhattisgarh. Present investigation mainly based on ethnobotanical survey on traditional and medicinal uses of Leguminosae family and confined to Rajnandgaon and Balod district of Chhattisgarh.

#### IV. CONCLUSION

The present study highlights the traditional and medicinal uses of Leguminosae by the tribal's. Because they still possess large traditional knowledge of plants and their therapeutic uses and the link of that traditional knowledge to modern research. Most of the legumes were used as medicine, food and fodder at the global level. The plants of the family leguminosae controls pollution, increases fertility of soil, checks soil erosion and are of aesthetic value. Some of the ethno-medicinal plants are facing high threats and are becoming rare, and conservation initiatives are needed to conserve them for sustainable management in the region. So it is need to extensive as well as scientific study of Leguminous plant in particular area and also aware the people of that area for conservation of that plants to ensure its availability and continuity for future generation.

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