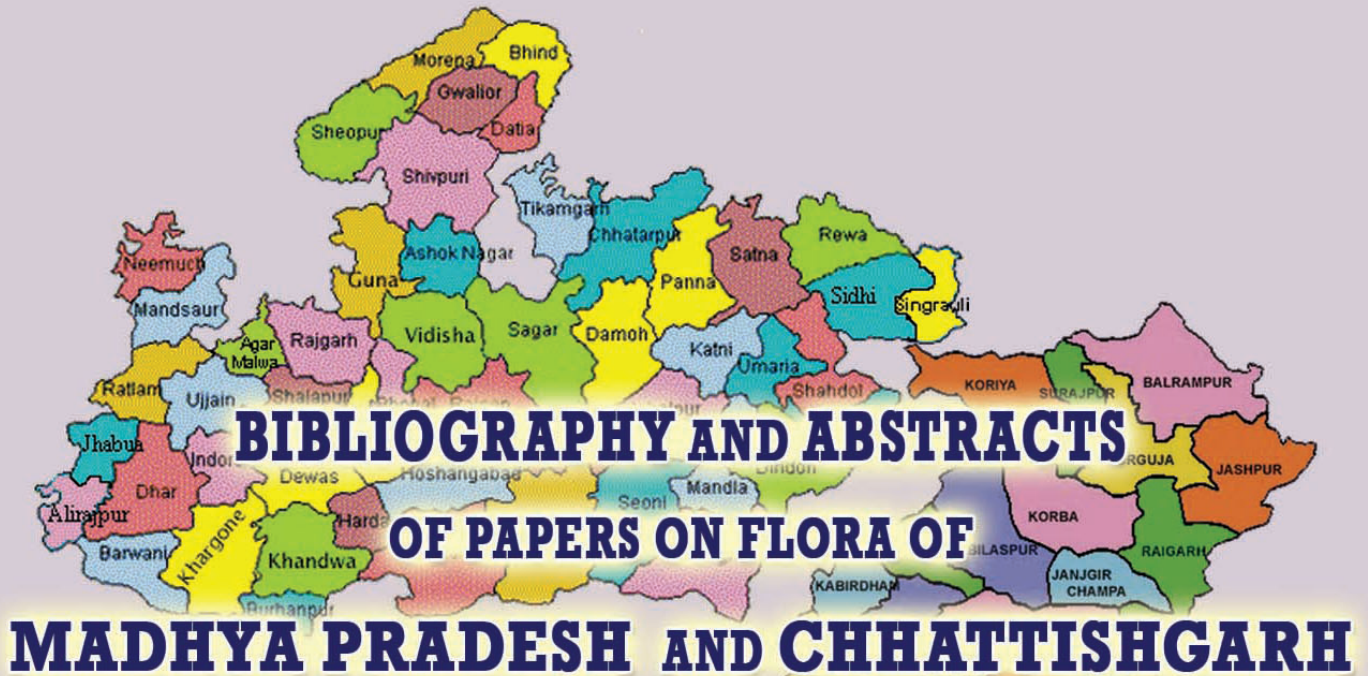




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BOTANICAL SURVEY OF INDIA

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

2019

**BIBLIOGRAPHY AND ABSTRACTS OF  
PAPERS ON FLORA OF  
MADHYA PRADESH AND CHHATTISGARH**

**Compiled by**

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**&**

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under ENVIS Programme



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## FOREWORD

The ENVIS Centre on Floral Diversity of the Botanical Survey of India has been publishing Bibliography and Abstracts of Papers pertaining to Floras of States and Union Territories of India. In this attempt, the Centre has already published consolidated bibliography and abstracts of papers on flora of West Bengal (in two parts), North East India – I, Andaman and Nicobar Islands, Maharashtra, Kerala, Tamil Nadu, Karnataka, Goa, Andhra Pradesh (including Telangana), Odisha, and Bihar and Jharkhand. In continuation to this series of publication, the states of Madhya Pradesh and Chhattisgarh have been taken up jointly, as the latter was formed only in the year 2000 by partitioning the undivided former Madhya Pradesh, for compilation of wide range of papers pertaining to the flora, vegetation, ethnobotany and issues related to traditional knowledge and conservation of plant resources of the two states.

Madhya Pradesh, the second largest by geographical cover (3,08,252 km<sup>2</sup>) and seventh largest in terms of population lies in the central part of India at geo-coordinates between 23°28'23.9664" N and 77°56'52.7928" E. Physiogeographically, the state can be recognized into 10 regions, whereas administratively, it has been divided into 52 districts under 10 different divisions, with Bhopal as the capital city. According to Forest Survey of India Report 2017, Madhya Pradesh has the largest forest cover (77,414 km<sup>2</sup>) in the country, occupies 25.11% of state's total geographical area; the forest cover in the state can be classified into three different classes: Very Dense Forest, Moderately Dense Forest and Open Forest.

Chhattisgarh, the centre-east state of India lies between 17°46'–24°5' N and 80°15'–84°20' E, and covers an area of 135,190 km<sup>2</sup>. The state has been divided into 27 districts under five major divisions, with its capital at Atal Nagar near Raipur. According to State of Forest Report 2017, the state has 55,547 km<sup>2</sup> areas under forest cover, which is 44.21% of state's geographical area; indeed, the state is well-known for its abundance of Sal forests, which occupy about 35% of total forest cover in the state.

The two states have diverse topography and variable climatic condition that support a rich and varied flora. Apart, both states are rich in availability of minerals and natural resources. Madhya Pradesh harbours a total of 2,213 species of flowering plants under 927 genera belonging to 163 families, whereas from the state of Chhattisgarh about 2,020 species of angiosperms in 913 belonging to 174 families have been reported. Timber, bamboos, canes, medicinal plants and non-timber forest produces such as lac, honey, gum, etc. are the potential natural resources of both states. The biological resources (the flora and fauna) in these two states have been collectively protected and conserved effectively in 12 National Parks (9 in Madhya Pradesh and 3 in Chhattisgarh), 36 Wildlife Sanctuaries (25 and 11) and six Tiger Reserves (5 and 1). Pachmarhi is the only Biosphere Reserve in the state of Madhya Pradesh. There are 46 different tribal communities in Madhya Pradesh, whereas the state of Chhattisgarh is an abode of 43 different tribal communities. Tribal population constitutes significant percentage of total population of these two states.

The present work was initiated with an objective to compile the scattered literature to prepare a comprehensive bibliography and abstracts of research articles, floras/books pertaining to the rich and diverse flora of both Madhya Pradesh and Chhattisgarh states. This present issue of bibliography and abstracts of papers on flora of these two state consists a total of 1726 references, including 485 on flora, vegetation, forestry and ecology, 204 references on fungi, lichens and algae, and other non-flowering plant groups and gymnosperms, 141 references on new discovery, new reports, rediscovery, revision and monograph, 43 references on endemism, IUCN threat status and conservation, and 853 references on ethnobotany, sacred groves and medicinal plants. An electronic version of this publication will be made available on ENVIS-BSI website ([www.bsienvnis.nic.in](http://www.bsienvnis.nic.in)).

Botanical Survey of India  
Kolkata

(A.A. Mao)

Director

## INTRODUCTION

On reorganisation of states after Independence, the earlier undivided state of Madhya Pradesh ( $17^{\circ}48' - 26^{\circ}52' \text{ N}$  and  $74^{\circ}02' - 84^{\circ}24' \text{ E}$ ) was formed with 43 districts, on 1st November 1956. Later, 16 more districts were created in 1998 by dividing large districts. The undivided state was covering a total geographical area of 4,63,452 km<sup>2</sup>, with **Bhopal** as the capital city of the state. In fact, **Nagpur** was the capital of Madhya Pradesh, before the reorganisation of Indian states. The undivided state was surrounded by Rajasthan on its northwest, Uttar Pradesh (undivided) and Bihar on its north and northeast, Orissa (now Odisha) on its east and southeast, Andhra Pradesh and Maharashtra on its south and Gujarat on its southwest.

The earlier Madhya Pradesh could be divided into five different physiographic regions namely (i) Gird Region, (ii) Malwa Plateau, (iii) Narmada Valley, (iv) Satpura Ridge, and (v) Chhattisgarh Plain. However, administratively the state had seven Commissioner's Divisions namely (i) Indore, (ii) Gwalior, (iii) Bhopal, (iv) Jabalpur, (v) Rewa, (vi) Surguja and (vii) Raipur. In 2000, the state was bifurcated into two states namely Madhya Pradesh and Chhattisgarh until then it was the largest state by area in the country. The new state Chhattisgarh was formed on 1st November 2000 by partitioning 16 districts comprising 10 Chhattisgarhi and 6 Gondi speaking southeastern districts of Madhya Pradesh.

## MADHYA PRADESH

Madhya Pradesh, a state in central India, lies between  $23^{\circ}28'23.9664'' \text{ N}$  and  $77^{\circ}56'52.7928'' \text{ E}$ . It is the second largest state in the country with a total geographic area of 3,08,252 km<sup>2</sup>, and constitutes 9.38% area of the country and 7th largest in terms of population. It borders the states of Uttar Pradesh to the northeast, Chhattisgarh to the southeast, Maharashtra to the south, Gujarat to the west, and Rajasthan to the northwest. Physiogeographically, the state can be recognised into following 10 regions: (i) Kaimur Plateau and Satpura Hills, (ii) Vindhyan Plateau (Hills), (iii) Narmada Valley, (iv) Wainganga Valley, (v) Gird (Gwalior) Region, (vi) Bundelkhand Region, (vii) Satpura Plateau (Hills), (viii) Malwa Plateau, (ix) Nimar Plateau, and (x) Jhabua Hills.

Whereas, administratively this large state has been divided into 52 districts under 10 different divisions, they are: **1. Bhopal Division (05 districts):** Bhopal, Raisen, Rajgarh, Sehore, Vidisha; **2. Chambal Division (03 districts):** Morena, Sheopur, Bhind; **3. Gwalior Division (05 districts):** Gwalior, Ashoknagar, Shivpuri, Datia, Guna; **4. Indore Division (08 districts):** Alirajpur, Barwani, Burhanpur, Indore, Dhar, Jhabua, Khandwa, Kargone; **5. Jabalpur Division (08 districts):** Balaghat, Chhindwara, Jabalpur, Katni, Mandla, Narsinghpur, Seoni, Dindori; **6. Narmadapuram Division (03 districts):** Betul, Harda, Hoshangabad; **7. Rewa Division (04 districts):** Rewa, Satna, Sidhi, Singrauli; **8. Sagar Division (06 districts):** Chhatarpur, Damoh, Panna, Sagar, Tikamgarh, Niwari; **9. Shahdol Division (03 districts):** Anuppur, Shahdol, Umaria; and **10. Ujjain Division (07 districts):** Agar Malwa, Dewas, Mandsaur, Neemuch, Ratlam, Shajapur, Ujjain.

**Topography and Soil:** The terrain of Madhya Pradesh is a part of the Peninsular Plateau in the north-central part of India, except for the valleys of Narmada and Tapti. The state topography comprises of plateau with a mean elevation of about 485 m above sea level, interspersed with two parallel mountainous ranges of Vindhya and Satpura. There are a variety of soils ranging from rich clayey to gravelly, however, the soils in the state can broadly be divided into four different types namely (i) Alluvial, (ii) Medium and Deep Black, (iii) Shallow and Medium Black, and (iv) Mixed Red and Black.

**Climate:** The state has a subtropical climate. The mean maximum temperature during summer season, from April to June is about 42°C (at times reaches 48°C), and the average temperature during winter months from November to March, is as low as 10°C in northern parts of the state, whereas in southern parts it varies from 10°C to 15°C. During the monsoon period from July to September, the state receives an average rainfall of about 1,370 mm. The degree of rainfall in the state decreases from east to west, whereas districts in southeastern part of the state receive the heaviest rainfall, with some parts receiving as much as 2,150 mm.

**Water Resources:** There are streams spread over almost the entire land surface of the state. Due to its geographic position and topography, the rivers in the state are originating within the state but draining out into the neighbouring states. Ganga, Godavari, Tapti, Narmada and Mahi are the major river basins besides there are ten sub-basins in the state namely Chambal, Sindh, Betwa, Ken, Tons (Tamsa), Sone, Narmada, Wainganga, Tapti, and Mahi; the rivers in northern part of the state drain largely into the Ganga basin and those in the southern part into the Godavari and Tapti system (Gosain & Rao, 2015). Dhasan, Parbati, Pench, Rihand, Shipra, Sindh, and Tawa are also some of the major rivers in the state.

**Vegetation/Forest:** Forests are predominantly found in central, southern and eastern parts of the state, whereas in northern and western parts of the state are deficient with vegetation. Madhya Pradesh has the largest forest cover (77,414 km<sup>2</sup>) in the country (FSI, 2017), occupies 25.11% of total geographical area of the state. Forest Survey of India has classified the forest cover in the state into three different classes: Very Dense Forest (6,563 km<sup>2</sup>); Moderately Dense Forest (34,571 km<sup>2</sup>); Open Forest (36,280 km<sup>2</sup>). However, as per the revised classification of forests in India by Champion & Seth (1968), the different vegetation/forests distributed in the state can be classified into three different types namely (i) Montane Subtropical, (ii) Tropical Moist Deciduous, and (iii) Tropical Dry Deciduous Forest.

The common constituents of deciduous forests found in the state are: **Acacia** spp., **Alangium salvifolium**, **Albizia** spp., **Anogeissus latifolia**, **A. pendula**, **Bauhinia** spp., **Boswellia serrata**, **Butea monosperma**, **Cordia obliqua**, **Hardwickia binata**, **Holarrhena antidysentrica**, **Phyllanthus emblica**, **Woodfortia fruticosa** and **Wrightia** spp. Montane subtropical forest occurs in small patches on hilltops of Pachmarhi over 1200 m elevation. Some of the common floral elements found in this forest type are: **Calamus** spp., **Carallia brachiata**, **Cyathia** sp. (tree fern), **Dillenia** spp., **Gnetum scandens**, **Litsea monopetala**, **Magnolia champaca**, **Mallotus philippensis**, **Mangifera indica**, **Manilkara hexandra**, **Symplocos laurina**, **Syzygium cumini**, and **Toona ciliata**.

**Plant Diversity:** As per a recent checklist of flowering plants of Madhya Pradesh prepared by the officials of Botanical Survey of India, the state harbours a total of 2,213 species under 927 genera belonging to 163 families. Of these, 1654 species in 711 genera and 130 families belong to dicotyledons and 559 species in 216 genera and 33 families belong to monocotyledons. Poaceae with 241 species are the largest family in the state followed by Fabaceae (228 spp.), Asteraceae (140 spp.), Cyperaceae (103 spp.), Acanthaceae (81 spp.), Euphorbiaceae (73 spp.), Scrophulariaceae (63 spp.), Lamiaceae (61 spp.), Rubiaceae (51 spp.), Malvaceae (48 spp.), whereas among the genera **Cyperus** (47 spp.) is the largest genus followed by **Crotalaria** (28 spp.), **Eragrostis** (22 spp.), **Euphorbia** (21 spp.), **Indigofera** (19 spp.), **Cassia** (19 spp.), **Ipomoea** (19 spp.), **Ficus** (19 spp.), **Desmodium** (17 spp.) and **Leucas** (17 spp.).

**Endemic and Rare Plants:** Only six taxa are endemic to the state: **Berberis hainesii** var. **brevifilipes**, **Digitaria duthieana**, **Eclipta prostrata** var. **dixitii**, **Ficus cupulata**, **Spodiopogon jainii** and **Trichodesma indicum** var. **betulense**. Some of the rare flowering plant taxa in the state are: **Alectra thompsoni**, **Argostemma courtallense**, **Barleria gibsoni**, **Berberis lycium**, **Blumea malcolmii**, **B. obliqua**, **Ceropegia macrantha**, **Dicoma tomentosa**, **Dipteracanthus cernuus**, **Dyerophytum indicum**, **Elyonurus royleanus**, **Eriocaulon duthiei**, **E. richardianum**, **Ficus beddomei**, **Flaveria trinervia**, **Flemingia stricta** subsp. **pteropus**, **Gymnema hirsutum**, **Hoya wightii**, **Lecanthus peduncularis**, **Leea compactiflora**, **Lolium temulentum**, **Microchloa indica**, **Neanotis calycina**, **Neptunia triquetra**, **Nomaphila parishii**, **Pycnocycla glauca**, **Peristylus stocksii**, **Trichodesma stocksii** and **Vernonia setigera**.

**Forest Resources:** Madhya Pradesh is one of the richest states in terms of availability of minerals and natural resources. The state is endowed with diverse forest resources. The primary forest resources obtained from the forests are: Timber, fuel wood, bamboo, canes and gums.

**Indigenous Tribal Communities:** According to Bhatt & Bhargava (2006a), the tribal population constitutes 20.27% of state's total population, however, as per 2011 Census, the total number of tribal population is 1,53,16,784, which is 21.1% of total population of the state. There are 46 different tribal communities in the state. Bhil, Gond, Kol, Korku, Sahariya, Baiga, and Bharia Bhumia are the major tribal communities in the state.

**Protected Areas:** The state has nine National Parks and 25 Wildlife Sanctuaries, together covering a total geographical area of 10,814 km<sup>2</sup>, and constituting 3.51% of state's total geographical area. Apart, the state has five Tiger Reserves namely Kanha, Panna, Bandhavgarh, Pench and Satpura, and one Biosphere Reserve, the Pachmarhi. The Pachmarhi Biosphere Reserve covers a total area of 4,926.28 km<sup>2</sup>, and also includes Bori and Pachmarhi Wildlife Sanctuaries and Satpura National Park.

## CHHATISGARH

Chhattisgarh, the centre-east state of India lies between 17°46'–24°5' N and 80°15'–84°20' E, and covers an area of 135,190 km<sup>2</sup>, is the 10th largest state by area in the country, and 16th

largest in terms of population. Chhattisgarh is surrounded by six different states: Jharkhand to the northeast, Madhya Pradesh to the west and northwest, Maharashtra to the southwest, Odisha located in the eastern side and Andhra Pradesh lies in its south and southeast form the boundaries of Chhattisgarh.

The state has been divided into five major Divisions, namely Bastar, Durg, Raipur, Bilaspur, and Sarguja, and administratively, each Division is grouped with districts: **1. Division Bastar (07 districts):** Bijapur, Sukma, Dandewada, Bastar, Kangaagaon, Narayanpur, Kanker; **2. Division Durg (05 districts):** Cremation, Rajnandgaon, Balod, Durg, Bemetra; **3. Division Raipur (05 districts):** Dhamtari, Gariyabad, Raipur, Baloudabazar-Bhattapara, Mahasamund; **4. Division Bilaspur (05 districts):** Bilaspur, Mungali, Korba, Janzagir-Champa, Raigarh; and **5. Division Sarguja (05 districts):** Jashpur, Korea, Surajpur, Sarguja, and Balrampur. Thus the state of Chhattisgarh has 27 districts with its capital at Atal Nagar near Raipur, the largest city in the state. Chhattisgarhi is the native language of people of Chhattisgarh.

**Topography and Soil:** The state can be divided into three distinct agro-climatic zones: (i) Satpura Ranges in the north (northern hill zone), (ii) plains of river Mahanadi and its tributaries in the centre (Chhattisgarh plains) and (iii) the plateau of Bastar in the south (Bastar plateau); these zones cover 21%, 51% and 28% of state's geographical area, respectively. Apart, the portion of Chota Nagpur Plateau in the northwestern part forms another important topographical division of the state.

Red-yellow soil is the most common soil type found in the state. Nearly 55% of state's terrain composed of this type of soil, which is formed by weathering of Gondwana rocks. Red sandy soil is the second most common soil type, found in approximately 30% of state. Besides, red loam soil, black cotton soil and laterite soil are found in the state. However, as per soil classification system the soils in the state can broadly be classified into 5 orders and 9 dominating subgroups ([www.chtenvis.nic.in](http://www.chtenvis.nic.in)).

**Climate:** It is hot and humid tropical climate, as the state lies near the Tropic of Cancer. The maximum temperature during summer is around 45°C (sometimes temperature reaches up to 49°C). The state receives an average rainfall of 1,292 mm, during monsoon, from late-June to October. Winter season with low temperatures (between 0°C and 25°C) and lesser humidity, is from November to January.

**Water Resources:** According to State Data Centre Team of Water Resources Department ([www.hydrologyproject.cg.gov.in](http://www.hydrologyproject.cg.gov.in)), the state of Chhattisgarh has five river basins/catchment areas namely Mahanadi, Godavari, Ganga, Brahmani, and Narmada. Mahanadi River Basin, which drains out 75,858.45 km<sup>2</sup> area, is the largest and also considered to be the lifeline of the state, followed by Godavari Basin (38,694.02 km<sup>2</sup>), Ganga Basin (18,406,65 km<sup>2</sup>), Brahmani Basin (1,394,55 km<sup>2</sup>), and Narmada Basin (743,88 km<sup>2</sup>). Mahanadi and its tributaries (Shivnath or Seonath, Hasdeo, Mand, Ib, Pairi, Jonk, Kelo and Tel) hold 58.48% of the state's water.



**Vegetation/Forest:** The state of Chhattisgarh ranks third among the states with large forest cover in the country. According to State of Forest Report, the state has 55,547 km<sup>2</sup> areas under forest cover, which is 44.21% of state's geographical area (FSI, 2017). The state has 4,163 km<sup>2</sup> areas of very dense forests. The state is well-known for its abundance of Sal forests, which occupy about 35% of total forest cover in the state; likewise the teak forests are abundant in the state, especially in western and southern parts.

The forests in the state can be classified into three different major forest types namely: 1. Tropical Moist Deciduous Forests [i. slightly Moist Teak Forests, ii. Moist Peninsular Sal Forests, iii. Moist Mixed Deciduous Forests]; 2. Tropical Dry Deciduous Forests [i. Dry Peninsular Sal Forests, ii. Northern Dry Mixed Deciduous Forests]; and 3. Montane Subtropical Forests (Central Indian Subtropical Hill Forests). Some of the predominant arboreal elements of the dry and moist deciduous forests are: **Albizia odoratissima, Bauhinia malabarica, Bombax ceiba, Buchanania lanzan, Careya arborea, Cassia fistula, Dalbergia paniculata, Dillenia pentagyna, Diospyros melanoxylon, Gmelina arborea, Haldina cordifolia, Helicteres isora, Hymenodictyon orixense, Ixora arborea, Lagerstroemia parviflora, Mallotus philippensis, Miliusa tomentosa, Mitragyna parvifolia, Pterocarpus marsupium, Semecarpus anacardium, Shorea robusta, Syzygium cumini, Tectona grandis, Terminalia alata and T. chebula**. The Central Indian Subtropical Hill Forest, the unique forest type of this region, is found above 1000 m elevation in the higher hill tracts of Bastar and Bilaspur, the areas also receive comparatively higher rainfall than other parts of the state. Some of the predominant floral elements of this forest type are: **Canthium dicoccum, Cedrela toona, Celtis cinnamomea, Chionanthus ramiflorus, Glochidion multiloculare, G. zeylanicum, Glycosmis arborea, Grewia tiliifolia, Litsea glutinosa, L. monopetala, Mallotus philippensis, Manilkara hexandra, Syzygium nervosum, Wendlandia heynei and W. tinctoria**. The state is also rich in aquatic vegetation.

**Plant Diversity:** Khanna & al. (2005) enumerated 2,020 species of angiosperms under 913 belonging to 174 families, of which 1456 species in 697 genera and 138 families belong to dicotyledons and 564 species in 216 genera and 36 families belong to monocotyledons. The grass family, Poaceae with 219 species is the largest family in the state, followed by Fabaceae (184), Asteraceae (107), Cyperaceae (100), Euphorbiaceae (80), Acanthaceae (73), Orchidaceae (69), Rubiaceae (56), Lamiaceae (48), and Scrophulariaceae (44). These ten dominant families comprise of 980 species, constituting 48.58% of total angiospermic flora of the state. Some of the dominant flowering plant genera in the state are: **Cyperus** (40 spp.), **Crotalaria** (23 spp.), **Fimbristylis** (22 spp.), **Eragrostis** (21 spp.), **Euphorbia** (20 spp.), **Ficus** (18 spp.), **Indigofera** and **Ipomoea** (16 spp. each), and **Desmodium** and **Cassia** (15 spp. each). The angiosperm flora of the state exhibits some affinities with Himalayas, flora of Gujarat and Rajasthan, peninsular region and with flora of Bihar and Odisha.

**Endemic and Rare Plants:** Only four flowering plant species namely **Eriocaulon raipurensis, E. rajendrababui, Maytenus bailadillana** and **Staurogyne perpusilla** are endemic to the state. Around 400 flowering plant taxa are rare in distribution in the state, some of them are: **Acampe**

**praemorsa, *Alysicarpus platycarpa*, *Ardisia quinquegona*, *Blumea clarkei*, *Clematis roylei*, *Eriocaulon hamiltonianum*, *Lespedeza juncea*, *Malaxis rheedii*, *Moullava spicata*, *Primula umbellata*, *Stylidium tenellum*, *Vernonia squarrosa*, *Vitis campylocarpa* and *Zeuxine strateumatica*.**

**Forest Resources:** Timber, bamboos, medicinal plants and non-timber forest produces such as lac, honey, etc. are the potential natural resources of the state.

**Indigenous Tribal Communities:** As per 2011 Census, the total number of tribal population in the state is 78,22,902, which constitutes one-third of Chhattisgarh's population. The indigenous tribal communities are mostly concentrated in the densely forested areas in the northern and southern parts of the state. Bastar is the district with large number of tribal population, about 70% of its population is from tribal community. There are 43 different tribal communities in the state (Bhatt & Bhargava, 2006b), and some of the tribes have subcategories as well. Gond, Kavar, Oraon, Halba, Bhattra, Sawar, Korwa, Binjhar, Bharia Bhumia and Baiga are some of the major tribal communities. Gond is the largest and one of the ancient tribal communities.

**Protected Areas:** The state has good diversity of wildlife, and to conserve them effectively, 3 National Parks, 11 Wildlife Sanctuaries, and 1 Tiger Reserve (Indravati). National Parks (2,899.08 km<sup>2</sup>) and Wildlife Sanctuaries (3,583.19 km<sup>2</sup>) collectively covering a total geographical area of 6,482.27 km<sup>2</sup>, constituting 4.79% of the state's total geographical area (FSI, 2017).

**Botanical History (Madhya Pradesh and Chhattisgarh):** Since 19th century, this central Indian region has been botanically explored by a number of workers. Victor Vincelas Jacquemont, the French botanist and geologist was the first to do exploration in the undivided Madhya Pradesh. Jacquemont collected plants from Sidhi, Rewa, Satna and Panna in 1830, and later in 1832, from Mandasor, Ratlam, Ujjain, Indore and West Nimar. Major Nathaniel Vicary collected plants from Central India, Bundelkhand, Sagar and Jabalpur during 1833. The Irish botanist Edgeworth in 1838 and during 1847–1848 made collections in Bundelkhand, Dhar, Malwa and Indore; William Griffith explored Malwa Plateau, Narmada Valley and Jabalpur during 1839, and William Munro collected plants from Chambal area in 1839. Major Beddome made botanical collections in Jabalpur during 1848. Sir Dietrich Brandis, the former Inspector General of Forests in British India botanically explored the Satpura Range and Bijawar, and Sir George King made plant collections in Bundelkhand, Malwa, Guna and Sagar during 1867. Charles Baron Clarke collected plants from Jashpur, Surguja and Central India in 1876, and J.F. Duthie between 1888 and 1891 explored Bundelkhand, Indore, Nimar, Jabalpur, Sagar, Damoh, Betul and Hoshangabad and George Watt in 1894 made plant collections from Raipur and Bilaspur.

Based on survey and botanical collections a number of publications on the botany (covering vegetation, plants, especially economic plants) of this region have been published by various European and Indian botanists since 19th century. The Flora of British India (Hooker, 1872–1897) was the first Flora to deal with plants of this region. Stewart & Brandis (1874) published the Forest Flora of North-West and Central India, which covered a large part of the state,

whereas, Duthie's Flora of the Upper Gangetic plains and the adjacent Siwalik and sub-Himalayan tracts (1903–1929) covered the parts of Madhya Pradesh lying north and west of the Vindhyan Range. Forsyth (1871) in his book, "The Highlands of Central India" gave an account on the forests and tribal life of the region. Hole (1904), Haines (1916) and Witt (1908, 1916) published their findings on the woody and economic plants of this region.

### Threats to the Biodiversity

According to India State of Forest Report (FSI, 2017), a net decrease of 12 km<sup>2</sup> forest cover has been observed in both Madhya Pradesh and Chhattisgarh. The decrease in forest cover in Madhya Pradesh is due to expansion of agriculture, developmental activities, submergence, mining and rotational felling, whereas in Chhattisgarh, the decrease in forest cover is because of mining activities, rotational felling, and conversion of forest lands for developmental activities. In Chhattisgarh, rivers such as Shivenath, Hasdeo, and Indravati (a tributary of Godavari) are found to be polluted at different stretches due to industrial, domestic and agricultural pollution.

### References

- Bhatt, S.C. & Bhargava, G.K. 2006a.** *Land and People of Indian States and Union Territories. Madhya Pradesh.* Vol. 15. Kalpaz Publications, Delhi.
- Bhatt, S.C. & Bhargava, G.K. 2006b.** *Land and People of Indian States and Union Territories. Chhattisgarh.* Vol. 6. Kalpaz Publications, Delhi.
- Duthie, J.F., Parker, R.N. & Turrill, W.B. 1903–1923.** *Flora of the Upper Gangetic Plain, and of the adjacent Siwalik and sub-Himalayan tracts.* Office of the Superintendent of Government Printing, Calcutta.
- Forsyth, J. 1871.** *The Highlands of Central India; Notes on their Forests and Wild Tribes, Natural History and Sports.* Chapman & Hall, London.
- FSI, 2017.** *India State of Forest Report 2017.* Forest Survey of India (FSI), Dehra Dun.
- Gosain, A.K. & Rao, S. 2015.** *Climate Change in Madhya Pradesh: A Compendium of Expert Views – II.* Madhya Pradesh State Knowledge Management Centre on Climate Change. pp. 27–42.
- Haines, H.H. 1916.** *Descriptive list of Trees, Shrubs and Economic Herbs of the Southern Circle Central Provinces.* Allahabad.
- Hole, R.S. 1904.** A contribution to the Forest Flora of Jubbulpore Division, Central Provinces. *Indian Forester* 30: 499–514, 566–592.
- Hooker, J.D. 1872–1987.** *The Flora of British India.* 7 Vols. L. Reeve & Co., London.
- Khanna, K.K., Kumar, A. & Jha, A.K. 2005.** *Floristic Diversity of Chhattisgarh (Angiosperms).* Bishen Singh Mahendra Pal Singh, Dehra Dun.

**Stewart, J.L. & Brandis, D. 1874.** *The Forest Flora of North-west and Central India. A Handbook of the Indigenous Trees and Shrubs of those countries.* W.H. Allen & Co., London.

**Witt, D.O. 1908.** *List of Trees, Shrubs and Climbers and other plants of Economic Importance in the Berar forest circle of the Central Provinces.* Nagpur.

**Witt, D.O. 1916.** *Descriptive list of Tree, Shrubs, Climbers and Economic Herbs of the Northern Berar forest circles: Central Provinces.* Allahabad.

## MADHYA PRADESH AND CHHATTISGARH

### Flora, Vegetation, Forestry and Ecology

1. **Agarkar, D.S. 1969.** "Enumeration of the plants of Lower Chambal Valley ravines, Madhya Pradesh". *Bull. Bot. Surv. India* 11(3&4): 398–402. Abstract: Little is known about the vegetation of this region; therefore, the present study has been undertaken by the author. A total number of 125 species have been enumerated from this region.
2. **Agarkar, D.S. & Tuteja, S.C. 1965.** "Notes on the flora of Greater Gwalior, Madhya Pradesh". *J. Vik. Univ.* 9: 117–133.
3. **Ahirwar, J.R. 2016.** "Diversity of weed plants in cultivated fields of Tikamgarh Districts of Madhya Pradesh". *J. Trop. Forest.* 32(1): 79–83. Abstract: An attempt has been made to study the diversity of weeds in cropping areas of Tikamgarh district of Madhya Pradesh. During the year 2013 and 2014, the agricultural areas of Tikamgarh district were surveyed and covered extensively to record the weedflora from Rabi and Kharif crops. During the course of field study, 53 plant species belonging to 44 genera and 20 families of angiosperms have been observed and recorded. Thus, cultivated fields were visited with several unwanted plants known as weeds which badly affect the growth and production of main crops.
4. **Ahirwar, J.R. & Tripathi, J.P. 2010.** "Phytosociological analysis of some woody plants of Garhkudar forest in Tikamgarh district of Madhya Pradesh (India)". *J. Trop. Forest.* 26(2): 55–59. Abstract: The quantitative structure of Garhkudar forest was studied in terms of frequency, density, abundance, A/F ratio and Importance Value Index. It was observed that the forest contains 30 species, of these, *Alangium lamarckii* and *Butea frondosa* were dominant tree species and *Aegle marmelos* and *Salmalia malabarica* were rare tree species on the basis of Importance Value Index. The importance Value index of this forest ranged from 1.91 to 50.48. On analyzing the A/F values of various recorded species, *Cassia fistula* showed regular distribution pattern whereas *Azadirachta indica*, *Flacourtia ramontchi*, *Holoptelia integrifolia* and *Mitragyna parviflora* showed random distribution pattern and the remaining species were having contagious distribution pattern.
5. **Ahirwar, Ramesh Kumar 2015.** *Flora and Fauna of Panna National Park, Madhya Pradesh, Central India.* Lambert Academic Publishing.
6. **Arora, C.M. 1968.** "The botany of Bailadilla, Bastar State, M.P.". *Bull. Bot. Surv. India* 10(1): 61–66. Abstract: The paper gives an account of the botanical tour undertaken recently in the Bailadilla area of Bastar State, Madhya Pradesh. A list of 109 species of flowering plants not previously recorded for the area (Mooney, 1942) is included.

7. **Asthana, A., Husain, T & Datt, B. 2007.** "A study on the floral ecology of Bhimbetka World Heritage Site (Madhya Pradesh)". *Indian J. Forest.* 30(4): 459–461. Abstract: Floristic diversity of Bhimbetka World Heritage Site (M.P.) has been studied during 2004-05 using both qualitative and quantitative parameters. Present study deals with floral ecology of the area. On the basis of important value index (IVI), *Hyptis suaveolens* is the dominant species of Bhimbetka forest. In general, distribution of most of the plant species was contiguous. *Tephrosia* is a less common species of this forest. Shannon Wiener Index of Bhimbetka forest is 3.4.
8. **Athaya, C.D. & Mishra, G.P. 1978–1979.** "Notes on the forest flora of Central India I. General survey". *Bull. Bot. Soc. Univ. Saugar* 25&26: 17–25. Abstract: The paper lists 112 species of flowering plants in nine sites of tropical dry mixed deciduous forests of Central India. Seasonal visits were made during 1977–1978, and species of 86 trees, 13 shrubs, 10 climbers, 2 parasites and one epiphyte were recorded, belonging to 42 dicot and 4 monocot families. The types of forests of the region can be organised into four categories: (1) pure teak forest; (2) pure *Anogeisuss pendula* forest, (3) pure *Acacia catechu* forest and (4) miscellaneous forests.
9. **Athaya, C.D. & Mishra, G.P. 1981.** "Notes on the forest flora of Central India III. Phytosociological studies". *Bull. Bot. Soc. Univ. Saugar* 28: 66–71. Abstract: The present paper deals with the phytosociological aspects of eight selected forest sites of Sagar district. Almost all forest sites were dissimilar in their vegetational composition except Shahgarh and Bandri, which were most similar not only in vegetation but also in topography and geology. Overall, average absolute density of saplings, coppices and trees of all species per hectare was found to be 443, 1050 and 1250 respectively. Amongst all tree species *D. melanoxylon* indicated its highest frequency value (98%) at Jamghat forest stand.
10. **Athaya, C.D., Pathak, K. & Bajpai, S.P. 2006.** "Ecological biodiversity of some forests of Sagar, Madhya Pradesh". *J. Bot. Soc. Univ. Saugar* 41: 37–43. Abstract: The present paper deals with some ecological investigations of biodiversity of eight selected forest sites of Sagar district. The tropical dry deciduous mixed forest types of the area are restricted mostly to the hilly terrain areas having five types on the basis of constituent species. Forest vegetation of the area indicates vast biodiversity in structure, composition and regeneration due to variation in geology, undulating topography, variation in soil composition and depth and fluctuating intensity of biotic operations having species composition of 86 trees, 13 shrubs, 10 climbers, 2 partial parasites and 1 epiphyte. Almost all forest sites indicated great biodiversity in vegetational cover except Shahgarh and Bandri. Overall average absolute density of saplings, coppices and trees of species per hectare was found to be 443, 1050 and 1250 respectively. The study area also shows diversity in natural regeneration of plants. Amongst various species the sources of

natural regeneration were found to be seedlings, saplings, coppices, root suckers and dying back phenomenon. Continuous type of regeneration seems to be the characteristic of biotically disturbed forests however stagnant type seems to be the characteristic in relatively less disturbed forests.

11. **Awasthi, A.K. & Dwivedi, A. 2010.** "Ecophysiological study of Ashwagandha (*Withaniasomnifera* L.) with particular reference to Kymore Plateau Region". *J. Trop. Forest.* 26(2): 9–14. Abstract: The present paper deals with the study of various ecophysiological parameters of Ashwagandha (*Withaniasomnifera* L.) a medicinally important plant with reference to Kymore plateau region of Rewa (Madhya Pradesh). Sampling from three sampling plots, identified for the study, was done after 45, 60, 75, 90 and 105 days of sowing. Linear increasing pattern was recorded in almost all the parameters under consideration. The photosynthetic and assimilatory parameters considered in the present investigation are indicative of better physiological performance of the species, suggesting ecophysiological suitability of the species for large scale cultivation of Ashwagandha in Kymore plateau region. This will not only add to the supply of this important medicinal raw material but will also provide economic support to the farmers.
12. **Awasthi, A.K., Dwivedi, A., Tripathi, K.K. & Singh, P. 2007.** "Assessing floral diversity of Bandhavgarh National Park: A phytosociological approach". *J. Trop. Forest.* 23(1&2): 63–76. Abstract: The phytosociological study is actually the description and structural classification of the existing plant community (Braun-Blanquet, 1932). Species composition is one of the important anatomical characters of the community, the study of which is a prerequisite for the effective management of vegetation. As wildlife species depend upon vegetation for food and cover requirements, the structure and composition of plant community is an important aspect of wildlife habitats. The value of wildlife habitats for wildlife species is directly linked to the type and variety of plant communities and their conditions. An attempt has been made to analyse various phytosociological characteristics like species composition, species diversity and similarity.
13. **Bajpai, A.K., Agarker, M.S. & Goswami, H.K. 1996.** "Biology, conservation and management of Bhoj wetland III. Floristic composition in and around upper lake, ecosystem Bhopal". *Bionature* 16(1&2): 53–64. Abstract: This paper presents additional observations on biotic components in and around the Upper lake, Bhopal. The major groups are Phytoplankton, Zooplankton, macrophytes, Aquatic Insects, Amphibians, Avifauna etc. In floristic composition the total taxa 104, have been identified belonging to 85 Genera and 46 Families. We realize that among the above flora *Trigonella occulta*, *Vernonia elegnifolia*, *Centella asiatica* and *Hygrophiza aristata* show very scare distribution (Endangered!). These plants are medicinally important, needing immediate attention for Germplasm Conservation.

14. **Bajpai, A.K., Verma, S.S.S. & Agarker, M.S. 1994.** "Ecological study on a fresh water pond in Gwalior, M.P.". *Bionature* 14(2): 123–129. Abstract: Planktonic distribution of a Govind puri, sewage fed and perennial pond at Gwalior was studied during July 1992 to June 1993. A total of ninety taxa were identified out of which 59, were to phytoplankton (23 taxa of Chlorophyceae 25 taxa of Euglenophyceae, 7 of Cyanophyceae and 4 taxa of Bacillariophyceae) and 31 species of Zooplanktonic forms (10 species of Protozoa, 16 species of Rotifera; 2 species each Ostracoda and Cladocera and 1 species of Copepoda). Seasonal distribution of these species and their relationship with some physico-chemical characteristics were also defined. Phytoplankton and zooplankton peaks do not occur simultaneously with dominance of Euglenoids and rotifers.
15. **Bakshi, T.S. 1948-1949.** "Autoecology of *Anisochilus eriocephalus* Benth.". *Bull. Bot. Soc. Univ. Saugar* 1(1&2): 5–7. Abstract: The present work deals with the autecology of *Anisochilus eriocephalus* Benth. Material for study was obtained from the Sagar city and Ata, a village about 40 miles to the north of Sagar. The species grows abundantly on house tops roofed with country tiles. The varieties of *Anisochilus carnosus* Wall. are unstable and that *A. eriocephalus* Benth. and *A. carnosus* Wall. belong to the same species but represent two opposite strains, one a definite calcifuges and the other a calcicole.
16. **Balpure, K.M. 1966.** "A botanical tour to the Marble Rocks, Jabalpur (M.P.)". *Bull. Bot. Surv. India* 8: 189–196. Abstract: This paper gives an account of the vegetation and the plants occurring near about the Marble Rocks, Jabalpur (M.P.). It includes about 275 species of flowering plants which were gathered during the two collection tours. The habitat has also been mentioned.
17. **Banerjee, K.L.B. & Lal, P. 1985.** "Vegetation of the little known district Seoni in Madhya Pradesh". *Indian J. Forest.* 8(4): 292–297. Abstract: The present paper represents the vegetation of an under explored district Seoni in Madhya Pradesh. The authors undertook the survey and studied the vegetation and flora of the district. The mixed dry deciduous forests dominated by 'teaks' and 'bamboos' have been divided into two main types and four subtypes on the basis of presence of 'teaks' and local variation of climate, altitude and substrate.
18. **Banerjee, S.K., Singh, A.K., Bhowmik, A.K. & Jain, A. 2002.** "Effect of lime kiln pollutants on soil and vegetation in Katni Area (M.P.)". *J. Trop. Forest.* 18(2&3): 41–50. Abstract: A study was conducted around lime kiln area of Katni (M.P.) to assess air pollution status different distances from the source of emission. Grid points were marked at 10, 50, 100, 200, 300 and 500 meters from the source of emission (Stack). SPM, NO<sub>x</sub> and SO<sub>2</sub> were estimated in the air at all grid points during summer and winter in NW and SE directions by high volume air sampler. Soil samples were also collected from all grid points in SE, NW, NE, SW directions and analyzed for their physico-chemical properties and microbial population. Quadrats were laid out for enumeration



of number of plant species occurring at different grid points and correlation was established between soil properties and microbial population. Results obtained showed maximum air pollution in SE direction at 50 m grid point both during summer and winter. It gradually declined with increase in distance from the source of emission. Soil pH, exchangeable  $\text{Ca}_2$ ,  $\text{Mg}_2$  and  $\text{CaCO}_3$  showed decrease with increase in distance from source, while organic carbon, total and available N, available P and microbial population showed increase with increase in distance from the source of emission. Number of species also increased with increase in distance from the source of emission in all directions. Soil pH, exchangeable  $\text{Ca}_2^+$ ,  $\text{Mg}_2$  and  $\text{CaCO}_3$  were found to be negatively correlated with microbial population (Bacteria, actinomycetes and fungi) where as other properties were positively correlated with microbial population.

19. **Baronia, A.K. 2005.** *Growth and cultivation studies on Chlorophytum Ker-Gawl. (Safed Musli) with special emphasis to economically viable varieties of Sagar Divison.* Ph.D. Thesis. Dr. H.S. Gour University, Sagar (M.P.) (Unpubsihed).
20. **Barua, P.T. & Tomar, R.S. 2014.** "Role of genus *Cassia* in combating malnutrition in Sahariya dominated Sheopur kalan region of Madhya Pradesh". *Int. J. Sci. &Res.* 3(6): 868–872.
21. **Bawistale, O. & Sahu, T.R. 2012.** "The family Euphorbiaceae of Chhindwara district (M.P.) India". *J. Trop. Forest.* 28(4): 52–59. Abstract: The present paper deals with the family Euphorbiaceae of Chhindwara district of Madhya Pradesh. On the basis of Study the family represents 13 genera and 35 species. The identification key to genera and species has been prepared, for each species with reference to nomenclature, relevant references, description, flowering and fruiting period, local name (if any) and habit and habited.
22. **Bhagat, M., Sahu, P.K., Shah, R.P. & Soni, M. 2014.** "Plant species diversity and phytosociological analysis in forest of Jaljali Mainpat, Ambikapur (C.G.)". *Int. J. Pharm. Life Sci.* 5(6): 3627–3630. Abstract: The present study was carried out to analyze the species diversity, structure, composition and tree vegetation in dry tropical forest of sal dominant forest of Jaljali Manpat, Ambikapur (C.G.) during the period 2013. The study sites of forests representing 12 species of tree species reported e" 30 cm GBH, and number of seedling and sapling species were observed 4 for each, resulting in a total of forty two plots. In present study measured the important value index trees species, species diversity, basal cover and relative density of sapling and seedling of Mainpat Ambikapur CG. The maximum basal cover area was observed in Sal and the data reveals that maximum IVI of sapling was observed in *Shorea robusta* in most of the sites.
23. **Bhalla, N.P. 1978–1979.** "Taximetric studies in Leguminosae". *Bull. Bot. Soc. Univ. Saugar* 25&26: 64–66. Abstract: In the present work three tribes i.e. Galegeae, Genisteae

and Hedysareae of Papilionatae are considered. Present paper deals with some conclusions which are found during taximetric studies of some genera of these tribes.

24. **Bhargava, H.R. & Bhattacharyya, S.1957.** "An artificial key to the Leguminosae of Sagar". *Bull. Bot. Soc. Univ. Sagaur* 9(1&2): 44–62. Abstract: An area of about 5 miles radius with the department of Botany, University of Sagaur, as the centre has been explored. One hundred and nineteen species have been collected, of which 82, 22 and 15 species belong to the sub-families Papilionoideae, Caesalpinioideae and Mimosoideae respectively. While all cultivated and wild plants of sub-families Caesalpinioideae and Mimosoideae have been included in the key, the cultivated plants belonging to the sub-family Papilioinoideae which are not represented as escapes of cultivation in this area have been excluded from the key.
25. **Bhatia, K.K. 1956.** "Contribution to the ecology of Teak (*Tectona grandis* L.f.) in M.P.". *J. Indian Bot. Soc.* 35: 357–364.
26. **Bhatia, K.K. 1956.** "A mixed teak-forest of Central India". *J. Ecol.* 46: 43–63.
27. **Bhatia, K.K. 1956.** "Teak bearing forests of Old Madhya Pradesh". *Indian Forester* 85: 710–722.
28. **Bhatnagar, P. & Urmalia, R. 2014.** "Status of *Sterculia urens* Roxb. trees in Madhya Pradesh, India". *J. Non-Timber Forest Prod.* 21(4): 207–210. Abstract: Destructive and unsustainable harvesting practices led to a decline of *Sterculia urens* (Gum karaya) trees from some of the forest areas of Madhya Pradesh. Therefore to assess the current status of *S. urens* trees, seven districts of the state were surveyed. Results revealed that gun Karaya collection is done by inflicting multiple blazes on *Sterculia* trees. The intensity of harvesting was found progressively high in Sheopur district, followed by Umaria and Damoh districts. Percentage of healthy trees is declining. Methods adopted by local gum collectors are sustainable and of serious concern leading to tree damage or even mortality. Gum collection is usually carried out throughout the year by locals gum oozing stops. Post harvesting practices are not properly followed leading to increased chances of contamination and poor economic returns.
29. **Bhatnagar, P., Bhalavi, R. & Lodhi, B.2017.** "Lac host plant diversity in Balaghat and Seoni districts of Madhya Pradesh". *J. Trop. Forest.* 33(1): 1–17. Abstract: Seoni and Balaghat districts, located in the south-eastern part of Madhya Pradesh state, constitute major lac production zone in central India. Lac is produced by an insect, named as *Kerriallacca*, which feeds on the succulent twigs and branches of selected tree species. Although *Palas* (*Buteamonosperma*) is the main host tree species in the region, there are several other species also which may act as alternative host species. Diversity assessment of lac host plant species in this region was carried out by the authors during August, 2016 under an all India network project coordinated by Indian Institute of Natural Resins and Gums, Ranchi. The study area was extensively visited and pockets of gregarious

occurrence of host plants were identified. Quadrats were laid out in these pockets to study various phyto-sociological and growth parameters of the potential host plants for the assessment of plant diversity. Palas was found to be the most abundant and most frequently occurring host species in the region with average density of 114 and 138 trees per ha. In Balaghat and Seoni districts, respectively. The other host species recorded in the quadrats were *Kusum* (*Schleichera oleosa*), *Ber* (*Ziziphus mauritiana*), *Ghont* (*Ziziphus xylopyra*), *Khair* (*Acacia catechu*), *Babul* (*Acacia nilotica*), *Akashmoni* (*Acacia auriculiformis*), *Sitaphal* (*Annonasquamosa*), *Tendu* (*Diospyros melanoxylon*) and *Bija* (*Pterocarpus marsupium*). In terms of abundance, *Ber* was found to be the distant second species with average density of 16 and 17 trees per ha. In Balaghat and Seoni districts, respectively. The other host plants had an average density of < 16 trees per ha. The host species were found occurring in forest lands, farm lands and revenue waste lands. In Balaghat district, forest lands had the highest density of 225 trees per ha., followed by farm lands (209 trees per ha.) and revenue waste lands (132 trees per ha.). However, in Seoni district, the maximum density (434 trees per ha.) was observed in farm lands, followed by forest lands (145 trees per ha.) and revenue waste lands (65 trees per ha.). Importance value index (I VI) of various host species in Balaghat district was found to be in the order of *Palas* (121.2) > *Babul* (37.4) > *Kusum* (30.5) > *Ber* (30.3) > *Tendu* (26.4) > *Khair* (22.3) > *Akashmoni* (17.0) > *Ghont* (8.9) > *Sitaphal* (6.0). In Seoni district, it was in the order of *Palas* (145.7) > *Kusum* (47.0) > *Ber* (25.8) > *Khair* (19.2) > *Babul* (18.5) > *Tendu* (14.7) > *Ghont* (13.9) > *Sitaphal* (11.7) > *Bija* (3.7). The findings of this study may be useful in planning for the conservation of the diversity of lac host plants and also for the extension of lac cultivation activity in the region which has a potential to provide additional income and livelihood to the local rural population.

30. **Bhatnagar, S. 1968.** *Ecological studies of forest of Sagar with special reference to litter and growth flora*. Ph.D. Thesis, Sagar University, Sagar (Unpublished).
31. **Bhatnagar, S.K. & Verma, S.K. 1986.** "Effects of 50% ethanol extract of *Calotropis procera* Ait. f, on ulcers caused by assorted types of carcinoma". *J. Econ Taxon. Bot.* 8(2): 489–490. Abstract: 23 cancer patients (12 male and 11 female) carrying ten types of cancer ulcers were selected for the study. Patient's age ranging from 35 to 60 years belonged to Madhya Pradesh rural localities. 50% ethanol extract was applied to ulcers from 1 to 9 days. Result has shown 60% growth regression.
32. **Bhattacharya, S. 1955.** "A list of the leguminous plants of Sagar and their distribution within the area". *Bull. Bot. Soc. Univ. Saugar* 7(2): 45–54. Abstract: An area of about 5 miles radius with the Department of Botany as the centre and the whole of Patharia Forest have been explored. 103 species have been collected out of which 13, 18 and 72 species belong to the subfamilies Mimoseae, Caesalpinieae and Papilionaceae respectively.

33. **Bir, S.S., Bedi, Y.S., Singhal, V.K. & Gill, B.S. 2012.** "Further analysis of the forest vegetation of central Indian mountains of Madhya Pradesh". *Indian J. Forest.* 35(1): 9–14. Abstract: From the academic point of view even today the forests of central India possess highly valuable tree wealth in spite of the fact that a lot of Teak and Sal plantations have been cut down after independence. The present studies on the forests were therefore under-taken for two more years in continuation of our early work. The thick forests occupy even today the ground growth of fuelwood plants and young timber trees of different species constituting highly thick ground vegetation. Abundant amount of water sources are available through the hilly streams which are helpful in the growth of dense forests. Presently, the explored forests consists of Dry Deciduous and Moist Deciduous types categorised mainly under the tropical forests whereas mountain subtropical forests flourish at lower altitudes. Dry Teak (*Tectona grandis*) and sal foests (*Shorea robusta*) are of common occurrence. Timber trees of central Indian mountains number more than several dozens and are of high value for future use. Detailed information is provided about the forest tree flora as well as about the ferns, the liverworts and shrubby flowering plants.
34. **Biscoe, W.F. 1910.** *A list of trees and shrubs of the Indor State.* Bombay.
35. **Brandis, D. 1874.** *The Forest Flora of North-west and Central India.* London.
36. **Burkill, I.H. 1910.** "A few observations made in the Central Provinces and Berar". *J. & Proc. Asiat. Soc. Bengal* 6: 101–107.
37. **Bux, F. & Acharya, V. 2017.** "Aquatic macrophytes of Khnadwa pond & Sendh pond, Naya Raipur, Chhattisgarh". *Indian J. Appl. Pure Biol.* 32(2): 255–263. Abstract: The present study deals with the genuine findings and reporting of aquatic macrophytes in the ponds of Naya Raipur, Chhattisgarh. This work is a fruitful outcome of the study survey undertaken from January, 2014 to December 2016, which showcases the occurrence and distribution of the aquatic macrophytes in the selected ponds, and were classified according to their habit. Both the water bodies viz. Khandwa Pond & Sendh Pond comply to be persistently watercharged all the year round thereby thriving its vegetation which includes *Scirpus articulatus*, *Hydrilla verticillata*, *Marsilea minuta*, *Ipomoea aquatica* are certain species to name a few. The study records the occurrence of 66 angiospermic, 2 algal, and 3 pteridophytic taxa, which would serve as the baseline data for the region.
38. **Chaturvedi, A. 1984.** *Flora of Ratlam district (M.P.).* Ph.D. Thesis, D.A.V.V., Indore (unpublished).
39. **Chaturvedi, A. & Diwanji, V.B. 1989.** "Biological spectrum of the vegetation of ratlam district (M.P.)". *Bull. Bot. Surv. India* 31(1-4): 114–116. Abstract: In the present paper, the life forms of the angiosperms of Ratlan district, belonging to 116 families, 461 genera and 802 species have been studied. The same has been compared with

Raunkiaer's normal spectrum and other spectra of similar climatic regions of India. Phaenerophytes, Therophytes, Chamaephytes, Geophytes, Lianas, Parasites and Epiphytes represent 14.5, 50.1, 12.1, 12.3, 10.3, 0.37 & 0.25 percentage of vegetation respectively. The dominance of therophytes indicates the phytoclimatic of district as therophytic which is characteristic of semi-arid zones.

40. **Chaturvedi, J.K. 1982.** "Tropical pines in Madhya Pradesh". *Indian Forester* 108(2): 163–170. Abstract: Tropical pines in Madhya Pradesh were first introduced in Amarkantak region in 1968, numbers of experiments were conducted at Amarkantak field station under State Forest Research Institute in nersury technique, choice of species, spacement, fertilizer application etc. and techniques of planting was standardized. Identification of suitable areas for raising tropical pines in the state was done and small trial plantations were undertaken. Based on field data such trials, Madhya Pradesh State Development Corporation submitted a Pine Plantation Project for Bastar which was financed by World Bank from 01.04.1976. Tropical Pines have been raised over an area of 230 ha and 1356 ha under research trials and pilot plantations respectively in Bastar. Tentative conclusion has been drawn from a number of experiments. Tests have shown the suitability of tropical Pines for pulpwood. Growth data has confirmed the fast growth of species and its increased outtura per hectare has encouraged the prospects of a paper industry in the region.
41. **Chaubey, O.P., Prasad, R.&Jamaluddin.1986.** "Effect of grazing on species diversity, organic matter production and soil properties in a typical grassland of Jabalpur (Madhya Pradesh)". *J. Trop. Forest.*2(4): 241–247. Abstract: The effect of grazing on the floristic composition, biomass production and-soil properties of a typical grassland of Jabalpur have been assessed. The results show that species diversity at grazed site is lower than the protected area of grassland. Many of the palatable grass species had disappeared at grazed site. The total density of ground vegetation was also found to be higher at protected site than grazed site. Biomass production, both aboveground and belowground was found to be markedly higher at protected site than at the grazed site. Improvement in the soil chemical properties was also observed at the protected site.
42. **Chauhan, R., Vyas, V. & Rathore, M. 2013.** "Physico-chemical status of Upper Lake Bhopal (M.P.)". *Life Sci. Bull.* 10(2): 205–206. Abstract: The present investigation involves the analysis of physico-chemical parameters of a water body, called Bhoj wetland, in Bhopal during the year 2007. A significant level of variation were found in respect to these parameters like air and water temperature, pH, conductivity, turbidity, DO, free carbon dioxide, alkalinity, total hardness, total phosphorus and nitrate. The results clearly indicated that the water of the lake is degraded.
43. **Choubey, O.P. & Shukla, P.K. 2006.** "Phytodiversity vis-a-vis biotic pressure in Achanakmar Wild life Sanctuary". *J. Trop. Forest.* 22(1&2): 59–69. Abstract: Achanakmar

wild life sanctuary of Chhattisgarh State (erstwhile M.P.) lies between latitude 22°24' - 22°35'N and longitude 81°34' - 81°55' E. It is spread over an area of 551.552 sq. km. in the Satpura Maikal series of ancient origin. Biodiversity of a region is the result of interaction of various biophysical, social, economic, cultural and ecological factors. The study of floristic composition of trees, shrubs and ground flora in quantitative terms reveals the complex dynamics of ecological changes taking place in space and time, fertility status of forests and habitats of both flora and fauna. The present paper deals with the quantitative vegetational status of Achanakmar wild life sanctuary. The sanctuary area is facing tremendous biotic pressure for extraction of fuel, timber, leaves, fodder, bamboos, fruits, NWFPs and medicinal plants, etc. The floral value of the area has been reflected with the presence of 129 genera and 172 species belonging to 53 angiospermic families. Angiospermic families were enlisted as Acanthaceae, Amaranthaceae, Anacardiaceae, Annonaceae, Apocynaceae, Araceae, Asclepiadaceae, Asteraceae, Bignoniaceae, Bixaceae, Boraginaceae, Celastraceae, Combretaceae, Commelinaceae, Cucurbitaceae, Cyperaceae, Dioscoreaceae, Dipterocarpaceae, Ebenaceae, Ehretiaceae, Euphorbiaceae, Fabaceae, Gentianaceae, Hypoxidaceae, Labiateae, Lamiaceae, Leeaceae, Liliaceae, Lauraceae, Lythraceae, Malvaceae, Meliaceae, Menispermaceae, Moraceae, Myrsinaceae, Myrtaceae, Nyctaginaceae, Palmae, Poaceae, Ranunculaceae, Rhamnaceae, Rubiaceae, Rutaceae, Salicaceae, Samydaceae, Sapindaceae, Sapotaceae, Scrophulariaceae, Sterculiaceae, Tiliaceae, Verbenaceae, Vitidaceae and Zingiberaceae. In all, 86 NWFPs were registered from the area. Species in commercial collection like *Chlorophytum tuberosum*, *Curcuma angustifolia*, *Bauhinia vahlii*, *Dioscoreas*, *Pueraria tuberosa*, *Embelia ribes*, *Gymnema sylvestre*, *Costus speciosus*, *Asparagus racemosus*, *Ventilago calyculata*, *Gloriosa superba*, and *Rubia cordifolia* revealed restricted distribution in the area. Besides, a large number of cattle camps harbored inside the sanctuary area are posing serious threat to ecosystem of this area. Heavy vehicles ply day and night in this area and cause air and sound pollutions. This, in turn, adversely affects the phenological behaviour of forest flora along with that of wild animals.

44. **Choudhary, M.C. & Upadhyay, R. 2009.** "A contribution to aquatic angiosperm flora of Hoshangabad". *J. Econ. Taxon. Bot.* 33(1): 155–161. Abstract: The present investigation provides an account of aquatic angiosperms of Hoshangabad. 99 species belonging to 38 families were recorded from different places of Hoshangabad. Place of collection, time of flowering and fruiting and field notes on some plants have been recorded.
45. **Choudhary, M.S., Upadhyay, S.T. & Upadhyay, R. 2012.** "Observation of natural dyes in *Ficus* species from Hoshangabad district of Madhya Pradesh". *Bull. Environm. Pharmacol. & Life Sci.* 1(10): 34–37. Abstract: The present study explores the dye yielding potential of barks of some *Ficus* species of family Moraceae, from Hoshangabad district of Madhya Pradesh. 20 species of family moraceae were studied for dyes present in

them, out of these four species of genus *Ficus* were observed to contain dyes in them, these were *Ficus carica* Linn, *Ficus cupuleta* Haines, *Ficus racemosa* (Roxb.) Linn and *Ficus retusa* (Linn.) auct. syn. *F. microcarpa* Linn. The botanical names, family, vernacular name and parts from which dye is obtained are described in this paper. The dyes were fixed on mercerized cotton after treating with mordents. Different shades of pink were fixed as dyes from these four species.

46. **Dagr, J.C. 2001.** "Biological spectrum and successional trends in Kshipra watershed area". *Indian J. Forest.* 24(3): 351–356. Abstract: All the phanerogamic 416 species distributed in 167 genera belonging to 85 families in Kshipra watershed, Ujjain district are carefully listed together with their life form class. The same have been compared with Raunkiaer's normal spectrum. Phanerophytes (including Mega-, Meso-, Micro-, and nano- Phanerophytes, Lianas and Succulents), Chamaephytes, hemicryptophytes, cryptophytes (including htdrophytes) and therophytes represent 20.8, 8.4, 8.2, 9.9 and 52.7 percent, respectively, showing therophytic climate. Discussing successional trends of the vegetation it has been concluded that the area under investigation was facing the biotic stress and the vegetation is also a biotic-climax. Closure to grazing and other human disturbances the entire area may be converted into a savannah forest which consequently will check the soil erosion.
47. **Daing, F.A., Dar, M.H & Singh, S.D. 2017.** "Distribution of some annual and perennial plants in BHEL area of Bhopal". *Int. J. Bot. Stud.* 2(6): 163–165. Abstract: Natural resources play a vital role in supporting life and maintaining of ecosystem. Bhopal is the capital city of Madhya Pradesh and central part of India. The present study was carried out at the BHEL area of Bhopal with the purpose of collecting and recording of annual and perennial plants from this region. For this purpose field surveys were carried especially during flowering and fruiting seasons. In the present study about 20 field visits were carried to different places of BHEL region of Bhopal. During the present survey about 20 plants under 12 families and 20 genera were recorded from different localities throughout the study area. In the present investigation the dominant family Fabaceae recorded maximum number of 8 species followed by oxalidaceae 2 where as family Primulaceae, Rubiaceae, Orobanchaceae, Scrophulariaceae, Mimosaceae, Dipsacaceae, Burseraceae, Moringaceae, Combretaceae and Caesalpiniaceae which recorded 1 species each. Out of 20 plants collected and recorded from the study, the plants were distributed as 10 trees, and 10 herbs. The present study shows that the study area has rich biodiversity, however the previous literature reports that some of the species have become extinct from this area which may be due to the anthropogenic activities and indiscriminate cutting and felling of trees in this area. Therefore the study of flora and its proper management is need of hour of this region for the protection of its biodiversity before the species from this region becomes extinct.

48. **Datta, R.N. 1954.** "Forestry in Madhya Pradesh". *Indian Forester* 80: 816–822. Abstract: Madhya Pradesh comprises the former province of C.P. and Berar and fifteen ex-states which merged in 1948. Proprietary rights were abolished in 1951. All forests vest in the state. The land area is 130272 sq. miles, 62400 sq. miles being under forest. The forest department manages 46803 sq miles. It has a Chief Conservator, a Deputy Conservator, five Conservators and 32 Divisional charges. The forest types are mixed, teak and sal. Teak, sal and other timbers, bamboos, lac, katha, tendu leaves, grazing and wildlife are the important forest resources. A revised forest policy has been formulated in 1952.
49. **Dewangan, P.& Acharya, V. 2017.** "Diversity of family Leguminosae in Raipur district of Chhattisgarh (India)". *Indian J. Appl. Pure Biol.* 32(1): 1–8. Abstract: In the present study Leguminous plants of Raipur show diversity in habitats three sub-family 1) Papilionoideae having 48 plants, 2) Mimosoideae-20 plants, 3) Ceasalpinoideae- 20 plants. This family exhibit herb, prostrate herb, shrub and trees and climbers both wild and cultivated. Flowering in most plants of this family occurs between March to August. Total 88 plants of the family Leguminosae are found during study. These plants show diversity in habits. Plants recorded during survey : Herbs- (36), shrubs- (15), Trees- (37), Some of the plants are *Acacia catechu*(Khair), *Butea monosperma*(Palas), *Hardwickia binata*(Anjan), *Aeschynomene indica*(Phulan), *Desmodium gangeticum*(Salparni), *Albizia lebbek* (Siris). Most of the plants are economically important plants. Presence of Nitrogen fixing bacteria in the root nodules of plant increases fertility of soil. Plants are sources of pulses, edible oils. Some Trees are forest produces as timber, dye, gum, nonwood forest produce. The present study provides the present status of the Family Leguminosae and database for future studies. The plants of the family controls pollution, increases fertility of soil, checks soil erosion and are of aesthetic value.
50. **Dewangan, P., Verma, S., Shukla, S., Acharya, V., Shrivastav, K. & Girokar, A. 2015.** "Study of phytodiversity of D.B. Girls P.G. College campus of Raipur (C.G.)". *Indian J. Appl. Pure Biol.* 30(1): 77–84. Abstract: Study of the different species of plants present in a particular area help in understanding the plant diversity of that area. Raipur is the largest city & capital of Chhattisgarh. It is situated at 21.14'14" North latitude, 81.38'15" East longitude. The study area is Govt. D. B. Girls P. G. College, located in Kalibadi area of Raipur district. Remarkable phytodiversity and presence of trees like *Dalbergia sissoo* (Shisoo), *Azadirachta indica* (Neem), *Leucaena leucocephala*(Subabool), *Ailanthus excelsa* (Mahaneem). Various shrubs like *Adhatoda vasica* (Vasak), *Calotropis gigantea* and *C. procera* (Madar) and herbs like *Acalypha indica*, *Tridax procumbens* etc. have been observed. The observation period was 2010-2013. Out of 155 types of plant species, total number of trees, shrubs and herbs are 37, 10 and 74 respectively. In addition to this 23 species of grasses like *Sporobolus diander*, *Dactyloctenium aegyptium*, *Digitaria ciliaris* etc. have been observed.



Gymnosperms like *Cycas* sp., *Juniperus* sp., *Thuja* and pteridophyta like *Nephrolepis* sp. are in cultivated condition whereas, pteridophyta like *Adiantum* sp. was found on the inner wall side of the well. Exotic weeds like *Parthenium* sp. and *Lantana camara* also occur in the area college. Some plants of the study area are of ethnobotanically importance and Non-wood Forest Produces (NWFPs), Trees like *Azadirachta indica* (Neem) is versatile plant, *Eucalyptus lanceolatus*(Neelgiri) yields oil of wintergreen, *Tamarindus indica* yields, wood and fruits, *Sapindus trifoliatus*(Reetha), yield NWFPs. The dominant families are Gramineae (Poaceae), Leguminosae and Euphorbiaceae. Phytodiversity of area includes useful plants, ornamental, wild as well as exotic weeds. Most of the plants are the soil binders.

51. **Dhagat, M.& Singh, R. 2012.** "Studies of ecological parameters of some ponds of Jabalpur city". *Life Sci. Bull.* 9(2): 389–390. Abstract: Samples from different water bodies of Jabalpur city were collected and analysed for physic-chemical parameters using standard method. Duration of study was April, 2009 to October, 2009. Samples were collected in the month of May, July and September. The parameters studied were temperature, pH, DO, TDS and BOD, turbidity. Turbidity and pH were in permissible limit. DO, TDS and BOD were found beyond the permissible limit.
52. **Dhakaray, K.P.S. 1978.** *Forest flora of Panna district.* Ph.D. Thesis, A.P.S. University, Rewa (unpublished).
53. **Dubey, K.2017.** "Biodiversity of cultivated plants in Khandwa Girls College campus". *Indian J. Appl. Pure Biol.* 32(1): 27–30. Abstract: Our country is unique because of great diversity of its natural ecosystems with a great wealth of biological diversity. Biodiversity is an essential component of nature. Biodiversity in flora of any place is important component of system as it ensures the survival of human species by providing food, fuel, shelter and medicines. For conservation of biodiversity it is essential to plant, to protect and to maintain the growth of plants. In the study the diversity of cultivated plants in the college campus indicates richness of floral biodiversity. Efforts are made to grow the rare plants of the area.
54. **Dubey, K. & Dube, A. 2016.** "Study of features of bark of some common trees of the East Nimar area (M.P.)". *Indian J. Appl. Pure Biol.* 31(1): 112–115. Abstract: The bark is the outermost protecting layer in perennial plants which results in the form of activity of lateral meristems. The bark tissue posses specific biochemical and physical features. With analysis of these features one can use these materials for different purposes. The products made by stem bark of various trees are cheaper and environmental friendly, as not polluting the environment.
55. **Dubey, V. 2006.** "Studies on weed flora of paddy crop of Bilaspur (C.G.)". *J. Bot. Soc. Univ. Sagar* 41: 56–65. Abstract: Phytosociological studies of weed flora of paddy

fields around Bilaspur revealed that 58 species of weeds were found to be associated with the crop. Species of Poaceae and Cyperaceae were most common. Other families represented were Amaranthaceae, Asteraceae, Fabaceae, Lythraceae and Scrophulariaceae. *Echinochloa colonum* and *Paspalum scrobiculatum* were found to be the most common and frequently distributed weed species in the direct-seeded rice fields. There was monthly variation in percentage frequency, density and abundance. The numerical strength of *E. colonum* increase with the growth of the crop after germination, thus making the inter-species competition severe.

56. **Duthie, J. F. 1903-23.** *Flora of the Upper Gangetic plains and the Adjacent Siwalik and sub Himalayan Tracts*. Botanical Survey of India, Calcutta, Vol. 1–2. Reprinted Edition (1960).
57. **Dutta, R.K. & Agrawal, M. 2003.** “Phenology of selected exotic plant species on coal mine spoil land”. *J. Non-Timber Forest Prod.* 10(1/2):66–70. Abstract: The present study reports the variations of phenological events in five exotic plant species, viz. *Acacia auriculiformis* A. Cunn., *Casuarina equisetifolia* J.R. Forst, *Cassia siamea* Lamk., *Eucalyptus* hybrid and *Gravelia pteridifolia* R. Br. developed on opencast coal mine spoil land, Northern Coal Limited, Sidhi district, Madhya Pradesh.
58. **Dwivedi, R. & Dubey, S. 2017.** “Effect of air pollution on leaf venation pattern of some tree species at Satna, Madhya Pradesh, India”. *Int. J. Bot. Stud.* 2(1): 125–128. Abstract: The automobile emissions constitute a major source of environmental pollution in Indian cities. Effect of urban air pollution on road side tree species *Mangifera indica* Linn., *Azadirachta indica* A. juss., *Polyalthia longifolia* Benth. et Hook. f. and *Cassia siamea* Linn. has been studied with special reference to venation pattern of leaves. Effect of air pollution on leaf venation pattern observed at two sampling sites (reference and polluted). The qualitative parameters like primary vein type, course of primary vein, course of secondary veins, inter-secondary vein, marginal ultimate venation, areoles shape, pattern of tertiary veins and type of venation pattern and the quantitative parameters such as length of primary vein in mm, no. of secondary veins along one side of primary, highest degree of vein order, no. of areoles /mm<sup>2</sup>, average size of areoles and absolute veinlets no. in 1000 were examined. The study shows that leaf venation pattern of tree species growing in polluted area were not much affected by air pollution.
59. **Gautam, A., Bajpai, P., Vaishnav, V. & Dhuria, S.S. 2014.** “Identification and enumeration of trees family and species of Guru Ghasidas Vishwavidyalay, Bilaspur, Chhattisgarh”. *Indian Forester* 140(3): 306–308. Abstract: Identification and enumeration of trees was carried out during year 2010-2011 in Guru Ghasidas Vishwavidyalay, Bilaspur, Chhattisgarh situated at 22°7'46.70' N to 82°08'30.74' E, on elevation of 913 feet. 72 species of trees of 65 genera belonging to 36 families are identified through frequent field surveys. The campus includes mainly *Acacia nilotica*, *Butea*

*monosperma*, *Terminalia arjuna* and species of *Ficus*, which are dominantly distributed around the campus. Numbers of planted species are higher than the naturally occurring species. *Peltophorum ferrugoneum* and *Senna siamea* are the most planted evergreen species.

60. **Gautam, S. & Mishra, S.K. 2017.** "Analysis of vegetation and floral diversity of Shahdol district, Madhya Pradesh, India". *Int. J. Bot. Stud.* 2(1): 60–62. Abstract: Present paper deals the vegetational analysis of Shahdol district. During present study records a total of 568 plants species which are distributed in 353 genera and 105 families. The plants are found in different life forms. Therophytic vegetation is dominant.
61. **Goyal, S. 2015.** "A study of heavy metals in spinach (*Spinacea oleracea* Linn.) plants of Bhopal city". *Indian J. Appl. Pure Biol.* 30(91): 85–87. Abstract: Heavy metals are the elements having a density greater than 5 in their elemental form. Metals that are discharged by industry i.e. cadmium, chromium, cobalt, copper, iron, mercury, manganese, molybdenum, nickel, lead, tin & zinc. Study of pollutants in vegetables has been a great importance. Industrialization and human activity for a better quality of life has always resulted in some impact on the environment leading to equilibrium imbalance of the natural system. The present study was aimed to determine the amount of toxic heavy metals, chromium and cadmium in spinach (*Spinacea oleracea* Linn.) plants of Bhopal city. The plant belongs to the family Chenopodiaceae. These heavy metals are toxic in nature and have become a serious health problem. Analysis of heavy metals were carried out by atomic absorption spectrophotometrically. The paper also highlights the phytochemical constituents and medicinal efficacy of spinach.
62. **Goyal, S. 2016.** "Study of water quality in upper lake, Bhopal". *Indian J. Appl. Pure Biol.* 31(1): 87–90. Abstract: The upper lake of Bhopal is main source for providing drinking water. The monthly average of temperature, pH, total suspended solids, chloride, sulphate, turbidity and heavy metals were analyzed for the water samples taken from the upper lake. Water quality parameters were analyzed and were evaluated according to the WHO Standards. The water quality may be affected in various ways by pollutants. Polluted water is nearly as bad as no water. Water pollution is mainly done by heavy metals like Cr, Cd, Ni and Pb.
63. **Griffith, W. 1842.** "Remarks on a few plants from central India". *Calcutta J. Nat. Hist.* 3: 361–367.
64. **Gupta, A., Rawat, A., Tiwari, E. & Sahu, T.R. 2007.** "Weed flora of Sagar in rainy & post rainy season". *J. Econ. Taxon. Bot.* 31(4): 839–844. Abstract: Most of the weeds have characteristics of enormous seed production, variety of dormancies, ability to grow and multiply under stress conditions and competitive ability and power of vegetative multiplication. The paper deals with about 119 species belonging to 81 genera and 26 families of the rainy and post rainy weed flora of Sagar. Besides enumeration of species,

phenology and habit of the plants have been recorded.

65. **Gupta, A.K., Khan, A.A. & Mishra, S.K. 2004.** "Biological spectrum of Amarkantak forest of Shahdol district (M.P.), India". *Advances Pl. Sci.* 17(1): 27–29. Abstract: The paper deals study of Biological Spectrum of Amarkantak forest of Shahdol district with 669 angiospermic plant species. Five life forms of different percentage were observed. The Phanerophytes (Ph) gain highest percentage 52.76% while Cryptophytes (Cr) lowest 4.78% only.
66. **Gupta, D.K. & Gupta, G. 2018.** "Study of plant diversity in Govt. Ghanshyam Singh Gupt Post Graduate College, Balod (C.G.) campus". *Int. J. Bot. Stud.* 3(1): 132–136. Abstract: District Balod is located on (Dalli–Rajhara road) Durg–Manpur National highway 930. It is famous for their tribal population, culture and dense forest cover presence of various plant species in particular area helps to understand the diversity and nature of that area. Increasing population and changing lifestyle lead extensive commercial exploitation of the natural resources and loss of biodiversity. Therefore, documentation of biodiversity is mandatory to develop the strategies of conservation and management. This present research paper deals with the detailed Study of plants diversity in A tropical deciduous forest area of Govt. Ghanshyam Singh Gupt College. College campus are very large area, its cover about 44 acre and out of city near Tandula Dam. Study of college campus vegetation and data collection period are between August 2016 to October 2017. We find 54 family in 168 types of plant species, those grasses 59, trees 37, shrubs 15, herbs 37 climber species 08 gymnosperm 3, aquatic plants 8 (Angiosperm 6 and Pteridophyta 3) recorded. Ecological analysis shows that Poaceae, Fabaceae, Asteraceae, Acanthaceae and Euphorbiaceae were dominant family and low present families are cactaceae, Lythraceae, Piperaceae respectively. Our study area college campus and college Garden where many ornamental plants and medicinal plants. My study show college campus diversity represent area diversity.
67. **Gupta, V.B. 1975.** "On a collection of grasses from Bari-Bareli range (Raisen district), M.P.". *Bull. Bot. Surv. India* 17(1-4): 71–74. Abstract: A systematic account of the grasses of Bari-Bareli Range is given as the area is likely to be submerged on account of the proposed dam on the Barna river. 73 species of grasses has been recorded from this area.
68. **Gupta, V.B. 1979.** "A contribution to the flora of Bari Bareli range (Raisen district), M.P.". *J. Bombay Nat. Hist. Soc.* 74: 657–682.
69. **Haines, H.H. 1914.** *Descriptive List of Trees, Shrubs and Economic Herbs of the Southern Forest Circle of the Central Provinces.* Allahabad.
70. **Harinkhede, D.K., Upadhyaya, S.D., Goutam, A.N, Verma, S.K., Khare, A.K. & Sharma, A. 2015.**"Regeneration study of tree species in natural forest of Balaghat district in Madhya Pradesh, India".*J. Trop. Forest.* 31(4): 66–76. Abstract: In this paper,

the status of regeneration potential of tree species in tropical deciduous forest of Balaghat district of M.P. was studied. To investigate tree, sapling and seedling population distribution, the regeneration status in 28 plots was studied. Total 70 plant species of 56 genera belonging to 34 families were recorded out of which 61 species of trees, 50 of saplings and 44 of seedlings were found in the forest. On the basis of Importance Value Index, *Terminaliatomentosa*, *Lagerstroemia parviflora*, *Diospyros melanoxylon*, *Cleistanthus collinus* and *Holarrhena antidysenterica* have been found as dominant species in the study area. As far as the regeneration status is concerned the maximum tree species (28.57%) have been found in good regeneration category. Significant variations in species richness and population density between tree life forms (i.e. tree, sapling and seedling) have been found in which nine new tree species were added in sapling and seedling stage. It is major ecological concern that about 21.47 % economically important plant species have been found in poor regeneration phase, whereas about 17.14% species were found having no regeneration in the study area.

71. **Hewetson, C.E. 1940.** "Note on the type of forest occurring in the higher parts of Central Provinces". *Indian Forester* 66: 468–478. Abstract: In the present paper the author saw a type of forest different from other forest in the central Province. No tree species peculiar in the hills are found. All the trees which occur may be found in lower elevation. The teak plant is absent in the hill.
72. **Hewetson, C.E. 1951.** "Preparation of a Flora of Madhya Pradesh and the Central Parts of the Indian union". *J. Bombay Nat. Hist. Soc.* 50: 431–433.
73. **Hole, R.S. 1904.** "A contribution to the Forest Flora of the Jubbulpore Division, C.P.". *Indian Forester* 30: 499–514, 566–592. Abstract: In the present 346 species have been reported from Jubbulpore Division, C.P.
74. **Hole, R.S. 1904.** *A List of Trees, Shrubs, and Economic Herbs and Northern Forest Circle, C.P.* Allahabad.
75. **Hora, S.L. 1949.** "Geographical features of the flora of Bailadilla range in Bastar state, C.P.". *Proc. Natl. Inst. Sci. India* 15: 369–373.
76. **Husain, T., Datt, B., Chaudhary, L.B., Asthana, A. & Agnihotri, P. 2010.** "Floristic diversity of Bhimbetka World Heritage site (Madhya Pradesh)– An overview". *Indian Forester* 136(2): 215–223. Abstract: Bhimbetka World Heritage site in Madhya Pradesh is quite important both from archaeological and biodiversity point of view. There are over 700 rock shelters with world's oldest Stone Age rock painting, which are surrounded by a thick cover of primeval forests supporting a rich biodiversity. The forests of the area are typically dry mixed deciduous type with preponderance of *Mitragyna parviflora*, *Terminalia alata*, *Careya arborea*, *Chloroxylon swietenia*, *Sterculia urens*, *Ficus mollis*, *Lannea coromandelica*, *Anogeissus latifolia*, *Schleichera oleosa* and *Diospyros melanoxylon* trees. An analysis of floristic diversity revealed that there are 201 species

of flowering plants belonging to 157 genera and 56 families. The legumes are most dominant in the area in respect of number of species (36 spp.), followed by families like Malvaceae (13 spp.) and Euphorbiaceae (12 spp.). An assessment of economic potential of the flora has also been made based on the first hand information generated from local inhabitants mainly Gond adivasis. The economically potential species are categorised into different groups based on their uses. Rare and endangered species have also been identified based on the status evaluation of their populations.

77. **Jadhav, Dinesh. 2011.** "Weeds in tribal inhabited localities of Ratlam district, Madhya Pradesh and their ethnobotanical uses". *J. Non-Timber Forest Prod.* 18(1): 85–90. Abstract: Present communication provides an enumeration of 48 weeds with phonological pattern and their ethnobotanical uses recorded from tribal inhabited localities of Ratlam district (Madhya Pradesh).
78. **Jadhav, Dinesh. 2012.** "Alien flora of Chhattisgarh". *J. Econ. Taxon. Bot.* 36(1): 79–85. Abstract: An attempt has been made to prepare a detailed account of alien/exotic flora of Chhattisgarh. In the present paper 149 alien/exotic angiospermic species belonging to 51 families and 123 genera are described. 44.30% (66 out of 149) alien/exotic plants came from America alone. The information has been gathered by field survey and from Available literature.
79. **Jadhav, Dinesh. 2013.** "Exotic flora of Madhya Pradesh". *J. Econ. Taxon. Bot.* 37(3): 564–575. Abstract: An attempt has been made to prepare a detailed account of exotic flora of Madhya Pradesh. In the present paper 253 exotic angiospermic plant species belonging to 71 families and 193 genera are described. 38.34% (97 out of 253) exotic plants came from America alone. The information has been gathered by field survey and from available literature.
80. **Jadhav, Dinesh. 2013.** "Exotic flora of Ratlam district, Madhya Pradesh, India". *Phytotaxonomy* 12: 115–122. Abstract: An attempt has been made to prepare a detailed account of exotic flora of Ratlam district. In the present paper 152 exotic angiospermic plant species belonging to 52 families and 125 genera are described. 39.22% (60 out of 152) exotic plants came from America alone. The information has been gathered by field survey and from available literature.
81. **Jadhav, Dinesh. 2014.** "Trees of Ratlam district (Madhya Pradesh)". *J. Econ. Taxon. Bot.* 38(3-4): 475–480. Abstract: In this paper a total of 96 trees belonging to 35 families and 77 genera have been enumerated. Most of the species (10 species) are belongs to family Mimosaceae. Rest of the species are followed by Caesalpiniaceae (8 species), Moraceae (7 species), Fabaceae (6 species) and Apocynaceae (5 species).
82. **Jadhav, Dinesh. 2014.** "Chasmophytic flora of Ratlam district, Madhya Pradesh, India". *Phytotaxonomy* 14: 94–99. Abstract: An attempt has been made to prepare a detailed account of chasmophytic flora of Ratlam district. In the present paper 96 chasmophytic

- angiospermic plant species belonging to 77 genera and 40 families are described. Of these, 71 species are herb, 15 shrubs, 7 climbers and 3 grasses.
83. **Jadhav, Dinseh.2015.** "Shrubs and climbers of Ratlam district (Madhya Pradesh)". *J. Econ. Taxon. Bot.*39(1): 35–40. Abstract: In this paper a total of 102 shrubs and climbers belonging to 39 families and 79 genera from Ratlam district of Madhya Pradesh have been enumerated.
  84. **Jadhav, Dinseh.2015.** "Angiospermic weed in Ratlam district of Madhya Pradesh". *Phytotaxonomy* 15: 114–117. Abstract: An attempt has been made to prepare a detailed account on weed flora of ratlam district. In the present paper 119 angiospermic weed plant species belonging to 94 genera and 41 families are reported. Of these, 89 species are herbs, 10 shrubs, 5 undershrubs, 5 grasses and 4 climbers.
  85. **Jadhav, Dinseh.2016.** "Biological spectrum of the Flora of Ratlam district (Madhya Pradesh)". *J. Non-Timber Forest Prod.*23(1): 57–58. Abstract: The paper gives an account of the biological spectrum of the flora of ratlam district (M.P.). Studies reveal that the percentage of therophytes is the highest, the vegetation of the area is predominantly herbaceous.
  86. **Jadhav, Dinseh.2016.** "Floral diversity of aquatic and wetland macrophytes of Malwa region of Madhya Pradesh and Rajasthan". *Phytotaxonomy* 16: 83–88. Abstract: An attempt has been made to prepare a floristic account of aquatic and wetlands of Malwa region of Madhya Pradesh and Rajasthan. In the present paper 109 angiospermic species belonging to 84 genera and 57 families are enumerated.
  87. **Jadhav, Dinseh.2016.** "Diversity of lianas in Ratlam district of Madhya Pradesh, India". *Phytotaxonomy* 16: 122–124. Abstract: An attempt has been made to prepare a detailed account on lianas species of Ratlam district. In the present paper 37 liana species belonging to 32 genera and 20 families are reported. Most of the species (6 species) belong to the family Convolvulaceae. Rest of the species are followed by Cucurbitaceae (4 species) and Oleaceae, Papilionaceae and Vitaceae (3 species each).
  88. **Jadhav, Dinseh.2017.** "Floristic diversity of angiospermic weeds in Madhya Pradesh: A review". *J. Non-Timber Forest Prod.*24(1): 49–54. Abstract: An attempt has been made to prepare a detailed account on weed flora of Madhya Pradesh. In the present paper 171 angiospermic weed plant species belonging to 134 genera and 50 families are described. Of these, 13 species are herb, 25 shrubs and under shrubs, 14 climbers, 5 grasses, 3 sedges and 1 twiner. The information has been gathered by field survey and from available literature.
  89. **Jadhav, Dinseh.2017.** "Analysis of floral diversity of Malwa region, Madhya Pradesh, India". *Phytotaxonomy* 17: 100–104. Abstract: The present investigation reveals that ca 950 plant species belonging to 615 genera and 145 families as naturalised in all parts of Malwa region of Madhya Pradesh. Majority of the species are herbs 56% (532

species) followed by shrubs & undershrubs 17.06% (162 species), trees 17.68% (168 species), climbers & twiners 8.84% (84 species) and epiphytic & parasites representing 0.42% (4 species). The dominant family is Fabaceae (83 species) followed by Poaceae (75 species), Asteraceae (60 species), Euphorbiaceae (35 species), Caesalpiniaceae (27 species) and Malvaceae (23 species). 71.47% of the flora consists of herbaceous element representing 679 species and 28.52% of the flora comprises woody elements (271 species).

90. **Jadhav, Dinseh.2017.** “The origin and significance of vernacular plant names in Ratlam district of Madhya Pradesh, India”. *Phytotaxonomy* 17: 132–135. Abstract: Many plants have local or vernacular names. They are made up of words from the native language of the region. But, after ICN the scientific names were readily accepted worldwide in preference to the vernacular names. As a result, the use of vernacular names declined and they received little attention in later periods. But research in ethnobotany in recent times studied vernacular names critically on etymological grounds and established their clear importance. The plant names, on etymological analysis, are found very interesting and inform on many aspects pertaining to science, human culture and civilization. The present paper explains the origin of vernacular names of 41 plant species used by Bhil tribe of Ratlam district (Madhya Pradesh), they have been established on the basis of their size, shape, colour, smell, taste, habit, habitat, distribution of plants or plant parts. The plant species have been given in alphabetical order with their family followed by local names including their meaning in English language alongwith the details basis for the naming of the plant species.
91. **Jadhav, Dinseh.2018.** “Floristic diversity of angiospermic weeds in Chhattisgarh, India”. *Indian Forester* 144(4): 398–399. Abstract: The present investigation 136 weed plant species are naturalised in all parts of Chhattisgarh state belonging to 47 families and 112 genera. Majority of the species of weed plants are herbaceous (100) followed by shrubs (13), undershrubs (7), small tree (1), climbers (12), twiner (1) and sedges (1). Most of the species (16 species) are belongs to family Fabaceae.
92. **Jadhav, D.K. & Singh, L.J. 2010.** “Community structure and floristic diversity of tree stratum of deciduous forest of Achanakmar-Amarkantak Biosphere Reserve”. *Indian Forester* 136(6): 725–735. Abstract: Preliminary studies of four representative forest sites having dense, medium, regenerated and degraded forest plots of one ha area were conducted in Achanakmar-Amarkantak Biosphere Reserve area for community structure and floristic diversity of tree layer. A total of 33 species were recorded. Density and basal area of trees in forests plots ranged from 240 (degraded forest) to 1270 (regeneration forest) stems ha<sup>-1</sup> and 23.65 (regeneration forest) to 37.57 (dense forest plot) m<sup>2</sup> ha<sup>-1</sup> respectively. Diversities in these forest plots were 1.46 to 2.24 (Shannon Index), 0.61 to 0.83 (equitability), 2.95 to 6.06 (species richness), 0.41 to 0.53



(concentration of dominance) and 4.05 to 12.8 (Beta diversity). The beta diversity was highest at distributed forest plot. Forest represents the gradient in diversity and composition as high, medium, poor. Knowledge gained from such studies will help in framing the policy on R and D for conserving the forest for biomass and diversity and its use on sustainable basis.

93. **Jain, A. & Dahare, D.K. 2012.** "Enumeration of tree flora of Guru Govind Singh Park (Ekant Park): A plant diversity rich place in Bhopal, Madhya Pradesh". *Indian J. Appl. Pure Biol.* 27(2): 161–164. Abstract: In the present study listing of arboreal species of Guru Govind Singh Park (Ekant Park) of Bhopal, Madhya Pradesh was done. A total of 96 tree species belonging to 80 genera and 33 families were recorded from a land area of 21 hectares. The species have been identified, arranged alphabetically along with their popular name, habit and flowering time of each taxa.
94. **Jain, A.K. 1978.** *Study of the vegetation of certain areas of Chambal ravines*. Ph. D. Thesis, Jiwaji University, Gwalior, Madhya Pradesh. (Unpublished)
95. **Jain, A.K. & Das, R.R. 1981.** "Air pollen survey at Gwalior city". *J. Indian Bot. Soc.* 60: 344–347. Abstract: The paper deals with the study of the air pollen at Gwalior for six alternate months during 1978. A total of 2122 pollen were trapped on slides exposed in air. A total of 27 pollen types are recorded. The families Gramineae, Compositae and Mimosaceae dominate the air among all the types. The maximum pollen was trapped during November, while minimum during July. The pollen of few species were recorded which are not present at and adjacent places of Gwalior.
96. **Jain, A.K. & Patole, S.N. 2001.** "Aquatic and marshy vegetation of Panchmari Biosphere Reserve (M.P.)". *J. Indian Bot. Soc.* 86(3&4): 141–146.
97. **Jha, A.K. & Khanna, K.K. 2005.** "Plant wealth (Angiosperms) of Kanger Valley National Park, Bastar (Chhattisgarh)". *Phytotaxonomy* 5: 12–31. Abstract: The paper is an account of 456 species of angiosperms occurring in Kanger Valley National Park, Bastar district, Chhattisgarh. A perusal of literature has indicated that 12 species are new records for Chhattisgarh state, while 37 taxa are new records for the erstwhile Bastar district.
98. **Jha, A.K., Khanna, K.K. & Jain, A.K. 2004.** "Wild ornamental plant of Kanger Valley National Park, Bastar, Chhattisgarh". *Phytotaxonomy* 4: 95–99. Abstract: An account of 33 species of wild angiosperms considered as potential ornamentals of Kanger Valley National Park, Bastar, Chhattisgarh is presented. Correct nomenclature of the species with citation, family name, brief description of the plant, flowering period, habitat and locality have also been given. Suggestions have been offered for the cultivation of plants on commercial scale within the state.
99. **Joseph, J. 1963.** "A contribution to the flora of Bori Reserve forests, Hoshangabad district, Madhya Pradesh". *Bull. Bot. Surv. India* 5(3&4): 281–299. Abstract: The study

of the flora of Bori Reserve Forests, Hoshangabad district, Madhya Pradesh has been undertaken during the years 1960 and 1961. The area stretches between 77°45' to 78°30' E. long. and 22°15' to 22°30' N. lat. On the southern slopes of Satpura range. As a result of three seasonal visits 432 taxa belonging to 317 genera of 92 families could be collected and studied. The flora presents a typical dry deciduous type of vegetation without any change in the main components throughout. Some of the common species of plants in this forest are *Anogeissus latifolia*, *Adina cordifolia*, *Aegle marmelos*, *Diospyros melanoxylon*, *Grewia tiliaefolia*, *Buchanania lanzan*, *Helicteres isora*, *Celastrus paniculata*, *Baliospermum montanum* and *Embllica officinalis*. The area under study lacks in hydrophytic vegetation as there is hardly any perennial natural water source. Similarly orchid and ferns are also rare.

100. **Joseph, J.& Vajravelu, E.1967.** "A contribution to the flora of Khari Reserve forests, Mandla district, Madhya Pradesh". *Bull. Bot. Surv. India* 9(1-4): 17-30. Abstract: This paper presents the essential features of topography, soil type, climate, vegetation and floristic composition of Khari Reserve forests, Mandla district, Madhya Pradesh. It includes an enumeration list of about 388 species belonging to 286 genera and 86 families of Angiosperms and Pteridophytes.
101. **Joseph, R.N. 1977.** *An ecological study of organic layer of some forests of Sagar.* Ph.D. Thesis, Sagar University, Sagar. (Unpublished).
102. **Joshi, S.R. 1964.** "Character of some Madhya Pradesh forest soil". *J. Indian Bot. Soc.* 43: 1-8.
103. **Kala, C.P. 2010.** "Home gardens and management of key species in the Pachmarhi Biosphere reserve of India". *J. Biodiversity* 1: 111-117. Abstract: Growing and maintaining of plant species by household members in the vicinity of dwelling places dates back to antiquity. A study was conducted in the Pachmarhi Biosphere Reserve (PBR) - one of the 15 biosphere reserves of India, with the major aim of understanding the perceptions of tribal communities, especially with respect to the home gardens and role of home gardens in their livings. Through questionnaire survey the information was collected from the buffer zone villages of PBR on the species planted, purpose and perceptions of raising home gardens and interrelated traditional knowledge of local people. The study documented 47 ethno-botanical species ranging from forestry to horticulture and agricultural as grown in the home gardens. These species were used for multiple purposes including food, medicine, vegetables, nutraceutical, fodder and cultural significance. The practice of raising home gardens was based on centuries of cumulative traditional knowledge, practices and beliefs with respect to the species and its environmental and ecological requirements.
104. **Kala, C.P. 2011.** "Indigenous uses and sustainable harvesting of trees by local people in the Pachmarhi Biosphere Reserve of India". *Int. J. Med. Aromat. Pl.* 1(2): 153-161.

Abstract: The Pachmarhi Biosphere Reserve (PBR) harbors some thick forests in central India that is inhabited by many tribal communities including Gond and Mawasi. This rich forest has provided ample opportunities to its inhabitants for observing and scrutinizing the various tree species for developing their own traditional knowledge. With this background, this paper aims to highlight and record in detail the traditional knowledge of tribal groups on the use of various tree species growing in PBR. Through questionnaire and interviews, the present study has documented a total of 46 tree species used by local people for food, medicine, and other purposes. Of these 46 tree species, 91% are used as food and medicine (50% for preparing medicine and 41% for food), 26% are used in performing various cultural practices, 22% for fuel wood and 17% for house construction. The important trees and their parts collected from the forests and nearby village areas by the local people are *Madhuca indica*, *Buchanania lanzan*, *Diospyrus melanozylon*, *Syzygium cumini*, *Terminalia chebula*, *Terminalia bellirica*, *Azadirachta indica* and *Tamarindus indica*. The findings of this study are discussed with respect to traditional harvesting and conservation practices of tree species in PBR.

105. **Kala, C.P. 2017.** "Plant-people interaction in urban landscape: A study of IIFM residential colony in Bhopal city of India". *J. Non-Timber Forest Prod.* 24(3): 163–168. Abstract: The present study was carried out in the residential colony of the Indian Institute of Forest Management (IIFM) at Bhopal, the capital city of Madhya Pradesh, with the major objective of studying the plant-people interactions in the urban ecosystem. Continuous observations were made round the year on the interactions of people with the plant species for years in order to explore their ethnobotanical uses. IIFM residential colony has an interesting amalgamation of both wild and domestic plant species. A total 78 species were documented during the present study. Of the documented species, the maximum species was used for food and over 29% had medicinal properties hence they were used for treatment of various diseases.
106. **Kandya, A.K. & Prashanth, K.P. 2008.** "A study of plant habitats in Achanakmar-Amarkantak Biosphere Reserve, India". *J. Bot. Soc. Univ. Sagar* 43: 12–24. Abstract: During a keen survey of the vegetation of Achanakmar-Amarkantak Biosphere Reserve, several types of habitats were recognized for various plant species. Such habitats are Pure Sal forest, Dense mixed forest, Open forest (degraded or sparsely vegetated), variously located slopes, open dry places, marshy places, forest margins (ecotone), wastelands, inside and near cultivated fields, roadsides, stream or river banks, moist and shady places, meadows (grasslands among forests), rock crevices, and valleys etc. Actually, every species requires a specific micro-climate for its best growth. Thus, all species of angiosperms have been assigned their habitats. Species of Algae, Fungi, Bryophytes, Pteridophytes and Gymnosperms have not been assigned such habitats as they have a broad-based habitat for the whole class.

107. **Kapgate, D.K. 2005.** "A fossil dicotyledonous root "Dicotylirhizos herbatiales" sp. nov. from Deccan intertrappean series of India". *J. Bot. Soc. Univ. Sagar* 40:113–120. Abstract: This paper is based on an investigation of a new species of Dicotylirhizos, from Intertrappean Beds of Mohgaonkalan, M.P., India. The specimen is small, one mm in diameter having six exarch xylem arch. It has 2 to 3 protoxylem elements per arc with scalariform pitting and 3 to 4 metaxylem elements per arc with alternate bordered and angular pitting. Central pith is of few parenchymatous cells. Secondary xylem with vessels which are 5- 10 $\mu$  diameter and 12 per sq.mm<sup>2</sup>. Pits and vessels are alternate, bordered and hexagonal. Fibres are nonseptate. Six broad medullary rays, each, against primary xylem arc. Xylem parenchyma is paratracheal diffuse type.
108. **Kapoor, S.L. & Yadav, H.L. 1962.** "Further contribution to the flora of Pachmarhi region". *Indian Forester* 88: 272–276. Abstract: This paper records 67 species of angiosperms as addition to the flora of Pachmarhi region covered by Rao and Narayanaswamy and Maheshwari in their recent publications and 25 species as new to the Pachmarhi zone of these authors; 15 species have been recorded from a new locality within the same zone. The families represented by more than 10 species are, in order of dominance: Gramineae, Papilionaceae, Cyperaceae, Euphorbiaceae, Compositae, Acanthaceae, Scrophulariaceae, Labiatae, Amaranthaceae and Malvaceae (with equal number of species), Convolvulaceae and Tiliaceae. A quantitative analysis of the various taxa of angiosperms met with in the region is also given.
109. **Karnik, C.R. 1961.** "Ecology of the forest of Eastern Satpuras". *J. Sci.* 4(2): 25–31.
110. **Kaushik, J.P. 1969.** "A contribution to the flora of Shivpuri, Madhya Pradesh". *Bull. Bot. Surv. India* 11(1&2): 51–69. Abstract: The paper deals with the flora of unexplored Shivpuri district of Madhya Pradesh as observed by the author during the year 1965 to 1967. The vegetation of this area is thorny scrub type. The collection made include 416 species in 311 genera belonging to 91 families.
111. **Kaushik, J.P. 1969.** "The vegetation of marshes, ponds and river banks in Shivpuri, Madhya Pradesh". *Bull. Bot. Surv. India* 11(1&2): 84–88. The paper deals with the aquatic and semi-aquatic vegetation of Shivpuri in Madhya Pradesh. The phenology, distribution in various habitats and ecology has been given. Hydrophytic vegetation of Shivpuri has been compared with that of other investigated parts of M.P. The collection made includes 101 species in 82 genera belonging to 37 families. *Ruppia maritime* Linn. is a new record for M.P.
112. **Kaushik, J.P. 1973.** *Studies on the vegetation of Shivpuri, Madhya Pradesh*. Ph.D. Thesis, Jiwaji University, Gwalior.
113. **Kaushik, J.P. 1983.** *Flora of Shivpuri, Madhya Pradesh*. Jiwaji University, Gwalior, M.P.
114. **Kaushik, J.P. 1994.** "Effect of environment on the flora Gwalior region of north Madhya Pradesh". *Acta Ecol.* 16(1): 41–49. Abstract: In past the area was having semi-evergreen

vegetation but due to anthropogenic activities the flora of the area is changing with fast rate. Some species have become extinct (*Ceratopteris thalictroides*) and some are under threat due to arrivals of "Ultra neophytes" such as *Parthenium hysterophorus*.

115. **Kaushik, J.P. 2001–2003.** "Changing patterns in floral biodiversity of central India". *J. Bot. Soc. Univ. Sagar* 36–38: 8–16. Abstract: Present communication deals with plant diversity in North Madhya Pradesh situated in Central India. The area was maintaining luxurious vegetation in past but at present it has dry deciduous vegetation. More than 1200 angiospermic plant species have been recorded from this area, out of which 16.62% species are endemic to India. Leguminosae is the largest family followed by Gramineae. Total four hundred eighty nine (489) genera are represented by a single species and *Cyperus* is the largest genus of the area. Flora of the area is dominated by herbaceous species (847) and 136 species are climber and 70 are aquatic. The common herbaceous species of the area were *Alternanthera sessilis*, *Argemone mexicana*, *Cassia obtusifolia*, *Tephrosia hamiltonii*, *Crotalaria medicagenia*, *Bothriochloa pertusa*, *Cynodon dactylon*, *Heteropogon contortus* etc. But due to edaphic conditions and anthropogenic activities, some species are showing changing patterns in their distributions and some 'ultra neophytes' are introduced to this area *Ceratopteris thalictroides*, *Butea monosperma* var. *lutea*, *Caesalpinia sappan*, *Crescentea cujeje* have been disappeared from the area. *Utricularia aures*, *Gymnema sylvestris*, *Ziziphus glabberima* are threatened. Ultra Neophyte *Parthenium hysterophorus* is leading towards monopolizing all types of habitats and reducing the number (plant m<sup>2</sup>) of other species. Such species are *Cleome gynandra*, *Amaranthus spinosus*, *Argemone mexicana*, *Tephrosia hamiltonii*, *Cassia obtusifolia* etc. Species establishing themselves through underground vegetative parts in addition to seeds are capable to co-exist with this ultra neophyte. These species are *Bothriochloa pertusa*, *Convolvulus pleuricaulis*, *Boerhaavia diffusa*, *Cynodon dactylon*, *Merramia emarginata*.
116. **Kaushik, J.P. & Singh, R.A. 1996.** "Poisonous cultigens of Gwalior region". *J. Swamy Bot. Club* 13: 29–32.
117. **Kaushik, J.P., Sikarwar, R.L.S. & Shukla, R.M. 1993.** "Flora of Gwalior Fort". *Arhat Vacan* 5(1): 7–25.
118. **Kenoyer, L. 1924.** *A weed manual of Gwalior State*. Calcutta.
119. **Khan, M.A.W. 1960.** "Ecology and potentiality of the Bamboo forests of Bilaspur Division, Madhya Pradesh". *Indian Forester* 86: 575–589. Abstract: Bilaspur forest division in Madhya Pradesh is well-known for its vast stretches of good quality bamboo (*Dendrocalamus strictus*) forests. Their distributional patterns as correlated with climate, geology, soil, physiography etc. are discussed. Also details of associated tree vegetation are furnished. To determine the productive potentiality of these bamboo forests, a multi-stage sampling technique was adopted and growth features were assessed in detail. Te

computed results are appropriately tabulated.

120. **Khan, M.A.W. 1973.** *Madhya Pradesh Plants*. Government Regional Press, Rewa, Madhya Pradesh.
121. **Khan, S.S. 2016.** "The flora of Bhopal, its analysis and reassessment". *Indian J. Appl. Pure Biol.* 31(2): 203–217. Abstract: The present paper deals with the floristic analysis of the Oommachan's, "The Flora of Bhopal (Angiosperms)" published in 1977. It is a very useful treatise on the subject and has filled the lacuna of systematic studies in the field of floristics (Confined exclusively to Angiosperms) of this area. According to him there are 121 families of dicots incorporating 436 genera and 688 species, whereas the number of families, genera and species of monocots is 27, 108 and 148 respectively. Among dicots herbs dominate with 45.24% species followed by trees (22.89%), shrubs (13.93%), climbers (11.86%) and undershrubs (6.06%). Likewise among monocots 78.94% of the species are herbaceous followed by trees (8.55%), shrubs (6.57%), climbers (5.26%) and undershrubs (0.65%). He has also recorded 39 species of exotic plants which are included in the above statistics. He has reported both wild and ornamental/cultivated plants. Among the dicots 46 out of 119 families exclusively comprise of ornamental/cultivated plants i.e. 38.65% families and do not represent wild plants. In monocots only one family i.e Pandanaceae has 100% cultivated status followed by Araceae with 50% wild plants and rest ornamentals. Since the publication of the said flora a number of developmental activities have taken place, resulting in the vanishing of the pre-existing species from some sites and addition of new species, both indigenous and exotic.
122. **Khan, S.S. & Zaheerul, H. 1980.** "Floristic studies of Gohrganj distt., Raisen, M.P." *J. Sci. Res.* 2(2): 232–234.
123. **Khanna, K.K. 1992.** "A taxonomic study of the family Ulmaceae in Madhya Pradesh". *Proc. Natl. Acad. Sci. India* 62: 587–592.
124. **Khanna, K.K. 1996.** "Moraceae in Madhya Pradesh". *J. Econ. Taxon. Bot.* 20(2): 317–335. Abstract: The paper deals with a taxonomic account of family Moraceae in Madhya Pradesh. A through and critical study revealed the occurrence of five genera and twenty nine species in the state. Three taxa viz., *Ficus concinna* Muq. var. *subsessilis* Corner, *F. laceolata* Buch.-Ham. and *Morus macroura* Miq. are new records for the state. The correct nomenclature of species, their synonymy, detailed description, phenology, distribution, uses and notes, if any, are described. Artificial key to genera and species are supplemented for the identification of taxa.
125. **Khanna, K.K. & Kumar, A. 1993.** "Floristic analysis of angiosperms from Madhya Pradesh". *Bionature* 26(1): 13–20. Abstract: The data of floristic analysis (angiosperms) of Madhya Pradesh have indicated that 2,214 species under 930 genera and 166 families occur in the state. Poaceae is the largest family (242 species) while *Cyperus* is

the dominant genus (47 species). The details of analysis along with endemic and rare plants and affinities of the flora with Western Himalayas, Eastern Himalayas, Rajasthan, Gujarat, Bihar, Orissa and Peninsular India have been provided in the paper.

126. **Khanna, K.K. & Kumar, A. 2001.** "Rare and less known flowering plants of Madhya Pradesh- A check list- III". *J. Econ. Taxon. Bot.* 25(3): 531–538. Abstract: The present paper deals with a list of 128 species of rare and less known flowering plants of Madhya Pradesh. Citation and distribution of each species in the state have been mentioned.
127. **Khanna, K.K. & Kumar, A. 2006.** "Floristic analysis of angiosperms from Madhya Pradesh". *Bionature* 26(1): 13–20.
128. **Khanna, K.K., Kumar, A. & Jha, A.K. 2005.** *Floristic diversity of Chhattisgarh (Angiosperms)*. Bishen Singh Mahendra Pal Singh, Dehra Dun. Abstract: The present analysis includes enumeration of 2,020 species under 913 genera belonging to 174 families. Out of these, 564 species in 216 genera and 36 families belongs to monocot and 1456 species in 697 genera and 138 families belongs to dicot.
129. **Khanna, K.K., Saran, Ram & Mudgal, V. 1991.** *Flora of Kasturbagram, Indore (Madhya Pradesh)*. Kasturbagram Krishi Kshetra, Indore.
130. **Khanna, K.K., Kumar, A., Dixit, R.D. & Singh, N.P. 2001.** *Supplement to the flora of Madhya Pradesh*. Botanical survey of India, Calcutta. Abstract: The present book deals with 379 taxa of angiosperms belonging to 233 genera and 65 families.
131. **Khare, P.K. 1984.** "Stand structure and species composition of a dry tropical reserve forest in Central India". *Bull. Bot. Soc. Univ. Saugar* 30 & 31: 8–16. Abstract: Studies carried out in the tropical reserve forest in central India reveal the heterogeneous nature of forest stand consisting of 32 species of trees and shrubs. The total structure of stand has been found to be influenced by both lower and higher diameter class trees. Basal area of the tree stand was found 12.88 m<sup>2</sup>/ha which is slightly less than even aged dry tropical forest stand reported from India. Tree species with more than 5% composition have been classified for the light demanding and shade tolerant nature. The magnitude of variation in this behaviour vary from species to species and also in different phases of their life span. The basal area of the stand has been compared with those reported from various tropical forests of the world. Importance value indices of all the tree species indicate the dominance of *T. grandis* Linn. f.
132. **Khare, V.S. 1977.** *Studies on the vegetation and flora of Ujjain district (M.P.)*. Ph.D. Thesis, Vikram University, Ujjain (unpublished).
133. **Khera, A. 2016.** "Poverty alleviation through non wood forest products in Madhya Pradesh". *J. Trop. Forest.* 32(2): 19–33. Abstract: The paper presents the contribution of non-wood forest products (NWFPs) in poverty alleviation of forest dwellers in Madhya

Pradesh. The study shows that non-destructive harvesting of non-wood forest products by local villagers with proper market linkages may lead to poverty alleviation. It shows symbiotic relationship between forest and forest dwellers. If proper market linkages are not provided and the poor gatherers do not get the proper prices of the produce collected by them, it may lead to exploitation by middlemen and over-exploitation of NWFPs in greed to earn more money, thereby leading to forest degradation. In order to optimize benefit to forest dwellers in collection and trade of forest produce, ensure appropriate returns from the NWFPs collected by them and to increase their average earnings, the Madhya Pradesh State Minor Forest Produce (Trade & Development) Cooperative Federation (MFP Federation) was formed. The MFP Federation has provided fair purchase price of NWFPs to collectors and thus, has increased their income.

134. **Kotia, A., Kumar, P., Tiwari, U.L., Jalal, J.S. & Prasad, A.N. 2013.** "Orchid diversity and distribution in Kanger valley National Park, Chhattisgarh". *J. Econ. Taxon. Bot.* 37(1): 207–215. Abstract: Kanger Valley National Park (KVNP), located in Bastar district of Chhattisgarh state, occupies an area of ca 200 km<sup>2</sup> and represents the Deccan plateau. The park lies in the natural transitional zone of sal (*Shorea robusta*) and teak (*Tectona grandis*). Though the park is relatively small, it supports several distinct vegetation types in close vicinity of each other, viz. Tropical Moist Deciduous, Tropical Dry Deciduous and Tropical Semi-evergreen Forest. The special habitats within the park are riverine forests, rocky outcrops and hilltops, which harbour a large number of interesting plants. So far, more than 530 species of flowering plants have been recorded from KNVP. Based on recent floristic surveys, we recorded about 30 species of orchids in this park that form nearly 45% of the total taxa reported in family from the state by the earlier workers. Of these, 23 species are being reported for the first time from this park. This paper deals with the orchid species diversity and distribution within KNVP.
135. **Kuldeep, R. & Acharya, V. 2018.** "Surey of aquatic plants of Kanker district (Uttar Bastar) Chhattisgarh, India". *Indian J. Appl. Pure Biol.* 33(1): 51–58. Abstract: The present study deals with the documentation of aquatic macrophytes from Kanker district (North Uttar Bastar) of Chhattisgarh India. The present investigation was conducted over a period of two years from June, 2014 to June, 2016. During the investigation the ponds were visited regularly and species growing there were recorded. The aquatic plant community comprises diverse group a macrophytes consisting of Angiosperms, Pteridophytes and Algae that occur seasonally or permanently in wet environment. During the present study, 41 macrophytic species were recorded, all species belonging to different families. Documentation and identification of plants will be helpful in planning for conservation of aquatic macrophytes diversity of the area. Ponds have been natural water source exploited by man for different purpose like domestic, agricultural & industrial uses, so resourceful ponds of the district are gradually degrading. The present study has been



- carried out for documentation and Identification of aquatic macrophytes of Kanker district (Uttar Bastar).
136. **Kulkarni, D.H. 1952-1953.** "Distribution of Teak (*Tectona grandis*) on the Northern slopes of Satpura Hills with special relation to geology". *Bull. Bot. Soc. Univ. Saugar* 5: 2–5. Abstract: This paper deals with the monographic study of the autecology of a single taxonomic unit, teak (*Tectona grandis*) as it grows on the northern slopes of Satpura Hills in the Madhya Pradesh, with special relation to geology.
137. **Kumar, A. 1988.** "The genus *Terminalia* L. (Combretaceae) in Madhya Pradesh". *J. Econ. Taxon. Bot.* 12(2): 415–420. Abstract: 8 species of *Terminalia* L. are known from Madhya Pradesh. It includes a new record (*T. coriacea*) from the state. A key to the species, description, distribution and phenology are given in the paper.
138. **Kumar, A. 1988.** "The family Opiliaceae in Madhya Pradesh, India". *J. Econ. Taxon. Bot.* 12(2): 430–432. Abstract: An account of the family Opiliaceae in Madhya Pradesh is provided. *Opilia amentacea* Roxb. is reported for the first time for the state from Pharsegarh forest, Bastar district.
139. **Kumar, A. 1995.** "Contribution to the rare flowering plants of the Indravati Tiger Reserve, Bastar (Madhya Pradesh)". *J. Econ. Taxon. Bot.* 19(2): 411–418. Abstract: The present communication deals with 23 rare flowering plants of Madhya Pradesh from the Indravati Tiger Reserve, Bastar district, Madhya Pradesh. Brief description, phenology and ecological notes of each taxa has been provided.
140. **Kumar, A. 1995.** "Elaeagnaceae— A rare family in Madhya Pradesh". *J. Econ. Taxon. Bot.* 19(3): 739–740. Abstract: The present paper deals with taxonomic account of family Elaeagnaceae in the state of Madhya Pradesh. The family is extremely rare in the state, and has not been collected since last more than 50 years.
141. **Kumar, A. 1998.** "Contribution to the flora of the Indravati Tiger Reserve, Bastar (Madhya Pradesh)". *J. Econ. Taxon. Bot.* 22(2): 287–320. Abstract: In the present paper vegetation, floristic analysis and a list of 7 taxa of pteridophytes and 561 taxa of angiosperms have been provided, as observed during three exploration tours in the reserve during 1987-1988.
142. **Kumar, A. 1997.** "Systematic account of family Araliaceae in Madhya Pradesh". *J. Econ. Taxon. Bot.* 21(1): 75–78. Abstract: In the present paper systematic account of family Araliaceae has been provided, as the family is not included in the flora of Madhya Pradesh— Volume I (eds. Verma *et al.*, 1993). The family is represented by 2 genera and 4 species in Madhya Pradesh. Description and distribution of the family, genera and species has been provided alongwith key to the genera and the species.
143. **Kumar, A. 1997.** "Taxonomic account of four families of angiosperms in Madhya Pradesh". *J. Econ. Taxon. Bot.* 21(1): 123–128. Abstract: The paper presents taxonomic

account of four families of angiosperms, viz., Elaeocarpaceae, Erythraliaceae, Saxifragaceae and Tropaeolaceae in Madhya Pradesh, as these families are not dealt in the flora of Madhya Pradesh – Volume I (Eds. Verma *et al.* 1993). Description and distribution of the families, genera and species alongwith key to the genera and species (wherever necessary) has been provided.

144. **Kumar, A. 2003.** *Flora of Indravati Tiger Reserve*. Botanical Survey of India, Calcutta.
145. **Kumar, A. & Khanna, K.K. 1998.** "Studies on the flora of Betul district, Madhya Pradesh". *J. Econ. Taxon. Bot.* 22(3): 495–516. Abstract: The present paper deals with a list of 388 taxa of angiosperms, 2 taxa of pteridophytes and 2 taxa of gymnosperms occurring in the Betul district in Satpura range of Madhya Pradesh. The list is a precursor to the flora of the district.
146. **Kumar, A. & Khanna, K.K. 2001.** "Wild ornamental orchids of Madhya Pradesh, India". *J. Econ. Taxon. Bot.* 25(3): 523–529. Abstract: Thirty four species of wild orchids considered as potential ornamentals of Madhya Pradesh have been described in the paper. Correct nomenclature of the species with the citation, brief description of the plant, flowering period, habitat and distribution in the state have been given. Suggestions have been offered for the cultivation of plants on commercial scale within the state.
147. **Kumar, A. & Lal, Jagdish. 1984.** "Inflorescence aberrations in three species of angiosperms". *J. Econ. Taxon. Bot.* 5: 206–208. Abstract: Aberrations in inflorescence of three species of angiosperms collected from Madhya Pradesh are reported with photographs.
148. **Kumar, A. & Lal, J. 1985.** "Notes of some rare plants of Madhya Pradesh from Kanha Tiger Reserve". *J. Econ Taxon. Bot.* 6: 325–329. Abstract: The present paper deals with description, distribution and ecological notes on 13 rare plants of Madhya Pradesh collected from Kanha Tiger Reserve.
149. **Kumar, A. & Lal, J. 1985.** "Contribution to the botany of Madhya Pradesh – IX (Verbenaceae to Santalaceae)". *J. Econ Taxon. Bot.* 7: 77–93. Abstract: 153 species and 20 varieties belonging to 72 genera and 15 families (from family Verbenaceae to Santalaceae) of angiosperms are listed in this paper, as a continuation of the earlier published works on the botany of Madhya Pradesh.
150. **Kumar, A. & Lal, J. 2003.** "Contribution to the botany of Madhya Pradesh– IX". *J. Econ. Taxon. Bot.* 7: 77–93.
151. **Kumar, A. & Shukla, A.N. 2009.** "Biological spectrum of the flora of the Indravati Tiger Reserve, Dantewada, Chhattisgarh". *J. Non-Timber Forest Prod.* 16(4): 291–293. Abstract: The paper gives an account of the biological spectrum of the flora of the Indravati Tiger Reserve, Dantewada, Chhattisgarh. Studies revealed that the plant climate is therophytic due to the highest percentage of therophytes.

152. **Kumar, A. & Srivastava, R.C. 1988.** "Rare and less known flowering plants of Madhya Pradesh". *J. Econ. Taxon. Bot.* 12(2): 293–303. Abstract: A list of 282 species of flowering plants which are of quite rare occurrence in the state of Madhya Pradesh, is presented in this paper.
153. **Kumar, A., Khanna, K.K. & Jha, A.K. 2003.** "Forest types of Chhattisgarh". *Indian J. Forest.* 26(4): 401–405. Abstract: The forests of Chhattisgarh state have been broadly categorised under tropical moist deciduous forests, tropical dry deciduous forests and montane sub-tropical forests that have been further divided into sub-categories. The data of dominant species of each sub-category and its occurrence in various districts have been provided in the paper. In addition, information on endemic, rare and endangered plants of the plants of the state has also been furnished.
154. **Kumar, A., Khanna, K.K. & Kumar, R. 2000.** "Rare and less known flowering plants of Madhya Pradesh- A checklist- II". *J. Econ. Taxon. Bot.* 24(3): 589–610. Abstract: The present paper deals with a list of 534 taxa of rare and less known flowering plants of Madhya Pradesh. Distribution of each taxa in the state has also been mentioned.
155. **Kumar, A., Khanna, K.K. & Shrivastava, J.L. 2006.** "Some additions and deletions in the flora of Jabalpur". *J. Trop. Forest.* 22(3&4): 54–61. Abstract: During critical study of specimens collected from Jabalpur district, it has been observed that 28 specimens were wrongly identified due to oversight. These misidentified specimens, representing 28 species are additions to the flora of Jabalpur (Oommachan & Shrivastava, 1996).
156. **Kumar, A., Tiwari, A.P. & Shukla, A.N. 2012.** "Aquatic macrophytes of Betul district (Madhya Pradesh)". *J. Non-Timber Forest Prod.* 19(2): 133–137. Abstract: The present paper deals with 109 species of aquatic macrophytes of Betul district as observed during extensive survey of the district during 1996-2002.
157. **Kumar, R. & Suman, N.R. 2009.** "Plant wealth of Ken Ghariyal Sanctuary, M.P.". *J. Econ. Taxon. Bot.* 33(3): 663–672. Abstract: The present paper deals with the topography, geology, climate, rainfall and soil in general. Floristically, the present investigation is primarily based on 3 years extensive tours undertaken in different seasons which resulted in recording the presence of 466 species of angiosperms belonging to 297 genera and 80 families. Out of these, 111 species in 62 genera and 12 families belongs to monocots and 335 species in 235 genera and 68 families belongs to dicots. Economic aspects of the flora, viz. Vegetable plants, fruit yielding plants, wild edible plants, timber yielding plants, fibre yielding plants, tannin and gum yielding plants and medicinal plants have been dealt briefly. Conservational aspects of the flora have also been discussed in brief for the benefit of policy makers, foresters and other plant managers. Literature consulted is cited under references for economy of space.
158. **Kumar, R. & Suman, N.R. 2009.** "Floristic diversity of Panna National Park, M.P.". *J. Econ. Taxon. Bot.* 33(4): 846–868. Abstract: Panna National Park lies in Vindhyan hill

ranges of Madhya Pradesh between 24°27' to 24°46' North latitudes and 71°45' to 80°90' East longitude, covering an area of 478.81 sq. km. The present paper deals with the topography, geology, climate, rainfall and soil in general. Floristically, the present investigation is primarily based on 3 years extensive tours undertaken in different seasons along with available herbarium data in BSA, BSD and CAL; critical investigation of these resulted into 609 species under 394 genera and 108 families. The vegetation of the area is discussed along with seasonal vegetation, hydrophytic vegetation, vegetation of special habitats and weeds of Kharif and Rabi crops. A separate chapter deals with interaction of plants and animals and their favourable habitat and also plant species used as staple food by different animals of Panna National Park. Economic aspects of the flora, viz. Cultivated crops, vegetable plants, fruit yielding plants, tannin and gum yielding plants and medicinal plants have been dealt briefly. Conservational aspects of the flora has also been discussed in brief for the benefit of policy makers, forests and other plant managers.

159. **Kunhikannan, C. 2008.** "Diversity of grasses, seasonal variations and ecological status of grasslands in Jabalpur, Madhya Pradesh". *Indian Forester* 134(2): 190–202. Abstract: The graminaceous flora of Jabalpur district is represented by 121 species belonging to 67 genera. Among them, occurrence of *Arthraxon quartinianus* (A. Rich.) Nash, *Elytrophorus spicatus* (Willd.) A. Camus, *Eulaliopsis binata* (Retz.) Hubb., *Heteropogon triticeus* (R. Br.) Stapf ex Craib, *Microchloa indica* (L.f.) P. Beauv., *Oropetium thomaeum* (L.f.) Trin., *Perotis indica* (L.) Kuntze, *Tragus roxburghii* Panigrahi, is rare. The study revealed that various biotic and edaphic factors play an important role in determining the composition of grasses and modifying their sequence of appearance. Most of the grasslands were subjected to constant pressure of grazing and burning, and therefore did not reach the climax form in response to climate. However, in certain protected pockets, they developed into main type- *Schima-Dichanthium*, while in the disturbed area they were replaced by various subtypes like *Schima-Dichanthium*, *Chrysopogon-Bothriochloa* and *Aristida-Eragrostis* subtypes, depending on the degree of disturbance. Grasses have major ecological role in reclamation of an area, owing to their fast regenerating capacity, tolerance to drought and arid conditions.
160. **Kushwah, R.B.S. & Kumar, V. 2000.** "Studies of flora in protected areas- The case studies of Satpuda, Bandhavgarh, Indravati and Madhav National Parks of Madhya Pradesh, India". *Indian Forester* 126(1): 71–77. Abstract: Attempts have been made for the first time to work out the biodiversity indices for flora in the four Parks, i.e. the Bandhavgarh (BNP), Indravati (INP), Madhav (MNP) and Satpuda (SNP) National Parks of Madhya Pradesh following standard sampling techniques and formulae. The values of Shannon-Wiener biodiversity indices as computed are found to be 2.508, 2.226, 1.842 and 1.815 respectively for MNP, SNP, INP and BNP. The values of the index of

evenness have also been computed which are 0.753, 0.668, 0.581 and 0.581 respectively for MNP, SNP, INP and BNP. The highest t-value and degree of freedom (df) found for INP while lowest in MNP which reveals that the two types of the selected forest sites (areas) are significantly different upto certain extent in terms of the diversity of dominant species in INP, while not in case of MNP. Thus the areas of these Pas with lower diversity indices needed to be given more attention for protection and conservation of biodiversity. In fact, these areas being peripheral to territorial divisions are more affected by the biotic pressure from the adjoining villages which need to be minimized. Thus the study is not only of academic interest but relevant for management of the Protected Areas.

161. **Kushwah, R.B.S. & Kumar, V. 2002.** "Status of flora in protected areas- The case studies of eight Pas<sup>1</sup> of Madhya Pradesh". *Indian Forester* 128(3): 271–288. Abstract: The term biodiversity means the variety and variability among living organisms from all sources and ecosystems on the earth. It includes diversity within species, between species and of ecosystems. Classification is an essential process in our daily lives and a necessary tool for our survival. For example, we need to know which plant, animal, fungi are useful and which are poisonous or dangerous. It is hard to define Biodiversity in mathematical terms. Hence, the 'Biodiversity indices' are used for the purpose. The Shannon-Wiener Biodiversity Index, based on the proportionate abundance of the species, provides an alternate approach to the assessment of biodiversity. Attempt has been made for the first time in the eight Pas of the Madhya Pradesh, following standard sample techniques and formulae, to compute Biodiversity indices in order to find the present status of flora. The value of Shannon-Wiener Biodiversity Indices and Index of Evenness has been computed. The maximum value (2.505, 2.511) was found for Madhav National Park followed by Satpura National Park. The minimum value (1.717, 1.763) was found for Pachmarhi Wildlife Sanctuary. The main recommendations of the study are: (1) Demarcation of the 'Biodiversity Zone' in each Pas and its conservation; (2) The areas with lower biodiversity indices need to be given more attention for protection and conservation; (3) 'Eco-development planning' with the active involvement of local people for each PA needs to be adopted along with the village-micro-planning, and (4) the high tourist pressure in PWS, SNP, BNP, RWS and SDS needs to be regulated by 'Eco-tourism planning' in these PAs.
162. **Ladha, J.K. 1977.** "A study of *Isoetes* in Madhya Pradesh". *Acta Bot. Indica* 5: 85–86.
163. **Lal, Jagdish & Kumar, Anand 1983.** "Contribution to the botany of Madhya Pradesh-VIII. Monocots: Hydrocharitaceae to Eriocaulaceae". *J. Econ. Taxon. Bot.* 4(2): 421–434. Abstract: The present paper enumerates 197 species belonging to 95 genera of monocots- Hydrocharitaceae to Eriocaulaceae (29 families). Each species is followed by its habit, habitat, phonological data and district-wise distribution.

164. **Lal, Jagdish & Kumar, Anand 1999.** "Notes on some rare plants from Amarkantak (Madhya Pradesh)". *J. Econ. Taxon. Bot.* 23(3):755–757. Abstract: In the present paper four rare plants from Amarkantak, Shahdol district (Madhya Pradesh) are reported for the first time. Taxonomic citation, brief description, flowering and fruiting period etc. for each taxon has been provided.
165. **Lal, Jagdish, Kumar, Anand & Kotwal, P.C. 1989.** "The botany of Kanha Tiger Reserve, Madhya Pradesh, India". *Biol. Mem.* 12: 1–85.
166. **Lal, R. & Panigrahi, G. 1967.** "Contribution to the botany of Madhya Pradesh- VI. (Compositae to Sapotaceae)". *Bull. Bot. Surv. India* 9(1–4): 262–267. Abstract: The paper which represents the sixth part in a series of communications on the flowering plants from Madhya Pradesh, presents an enumeration of 105 species, belonging to the families Compositae to Sapotaceae, following Bentham and Hooker's (1883) system. Notes on habitat, flowering and fruiting condition, exact localities from where species have been collected together with field nos. of the collector's, abundance in the area are appended to every species enumerated.
167. **Lal, R. & Panigrahi, G. 1977.** "Contribution to the botany of Madhya Pradesh- VI. Meliaceae". *Taxon* 26(5&6): 523–540.
168. **Lall, J. 1990.** "Vegetative structure and regeneration studies on two adjacent protected and unprotected tropical forest sites in central India". *Indian Forester* 116(3): 194–201. Abstract: Present paper deals with differences in forest structure and regeneration of Bandhavgarh National Park (protected site) and Tala Forest range (unprotected site). Species diversity index ( $H'$ ) was found to be significantly higher at Bandhavgarh National park site indicating species richness and their abundance. The two sites could be segregated even on the basis of differing abundance of common dominant species as revealed by Hotteling's  $T^2$  test. In general regeneration pattern of species was observed to be far netter at Bandhavgarh National Park than at Tala forest. The degraded forest conditions at Tala Forest are attributed to severe biotic pressure as the forest area is open to human interference from nearby villages.
169. **Maheshwari, J.K. 1958.** "The woody plants of Khandwa (Madhya Pradesh)". *Bull. Bot. Soc. Univ. Saugar* 10(1&2): 27–50. Abstract: The present work is based on the collections of several excursions undertaken by the author at various season during the years 1958–1959 and is confined to the study of trees, shrubs and woody climbers of this area. In total 157 species are enumerated with their scientific name, small description, local name and flowering & fruiting period.
170. **Maheshwari, J.K. 1960.** "The grassy scrub vegetation of Khandwa Plateau, Madhya Pradesh". *Bull. Bot. Surv. India* 2(3&4): 349–356. Abstract: This paper deals with a floristic and ecological account of the grassy scrub vegetation of Khandwa plateau and its environs. Our knowledge regarding the vegetation of this tract is scanty and, therefore,

the present study was undertaken by the author during the years 1958 and 1959. The physiognomy of the vegetation during the year is discussed. General observations on plant communities and ecological aspects of the vegetation are added. At the end, an Appendix gives an annotated list of 248 species of plants, comprising the grassy scrub vegetation of the area.

171. **Maheshwari, J.K. 1960.** "The vegetation of Asirgarh hills (Madhya Pradesh)". *Indian Forester* 86: 553–558. Abstract: This paper deals with the vegetation of Asirgarh, a famous hill fort in Madhya Pradesh. The present work was, therefore, undertaken by the author during 1958-1959, and is confined mainly to the study of trees, shrubs and climbers inhabiting the hills. A total number of 145 species of plants is reported from this hill.
172. **Maheshwari, J.K. 1960.** "The vegetation of marshes, swamps and riversides in Khandwa Plateau (M.P.)". *J. Bombay Nat. Hist. Soc.* 57: 371–387.
173. **Maheshwari, J.K. 1961.** "The weeds and alien plants of Asirgarh, M.P.". *J. Bombay Nat. Hist. Soc.* 58: 202–215.
174. **Maheshwari, J.K. 1962.** "Notes on the flora of black cotton soil in East Nimar, Madhya Pradesh". *Indian Forester* 88: 115–135. Abstract: The paper deals with the flora of black cotton soils in East Nimar district, Madhya Pradesh. Our knowledge regarding the vegetation and flora of this region is scanty and therefore, the present study was undertaken by the author during the year 1958. A large part of the area under study is occupied by the black cotton soil popularly known as *regur* soil. An annotated list of 180 species of plants, comprising the flora of *regur* soil is given.
175. **Maheshwari, J.K. 1963.** "A contribution to the flora of Kanha National Park, Madhya Pradesh". *Bull. Bot. Surv. India* 5(2): 117–140. Abstract: This paper deals with a floristic account of Kanha National Park. No literature on the flora of this famous Park in Madhya Pradesh is available. The present study was, therefore, undertaken with a view to prepare an annotated list of the flowering plants and ferns inhabiting the park. A total number of 275 species of plants is reported from this park.
176. **Maheshwari, J.K. 1989.** In *Methods and Approaches in central India*. Society of ethnobotanist Lucknow:87-188.
177. **Mall, L.P. & Khan, M.S. 1958.** "Ecological study of herb layer of Patharia forest". *Bull. Bot. Soc. Univ. Saugar* 10(1&2): 19–26. Abstract: The present work deals with the herb layer alone of this forest in relation to tree cover, soil and topography, which are believed to have considerable influence on the availability of minerals, moisture and light. Some phyto-sociological characters of herb layer in Patharia forest have been studied. The herbs on top, slope and valley differ in their composition and cover. The epidermal characters of leaves of some important species have been studied. Their root system

has also been examined. The osmotic concentration of cell sap of some species has been determined. Some environmental factors operating on the herbs including edaphic and climatic have been analysed.

178. **Masih, S.K. 2002.** "Diversity at top canopy levels in Sardae Sarovar Dam areas in Madhya Pradesh". *Indian J. Forest.* 25(4): 448–452. Abstract: An area of 2,732 ha. Forest land and 12,926 ha. Of cultivated and wastelands of 193 villages were surveyed for the enumeration of standing growing stock under different GBH classes (cm) at Top Canopy Level (TCL) in the submergence areas of sardar Sarovar Dam Project in M.P. As a result of enumeration at TCL in forest areas, a total of 1,49,900 trees under different GBH classes like 21/30 (1,03,161), 31/45 (14,380), 46/60 (12,083), 61/90 (12,596), 91/120 (5,301), 121/150 (1,518) and over 150 (861) have been recorded. Whereas in 193 submerged village areas about 2,46,306 trees of above GBH Class represents 71,011; 61,544; 51,022; 37,449; 15,161; 6,303; and 3,818 respectively. The volume m<sup>3</sup> has also been calculated as Teak 1,255.45 m<sup>3</sup> (1.262/ha), other timber species 868.987 m<sup>3</sup> (0.873/ha.) in Jhabua Division and 33.60 m<sup>3</sup> (0.062/ha.) in Dhar Division and other species 4,436.383 m<sup>3</sup> (4.459/ha.) in Jhabua and 4,296.35 m<sup>3</sup> (7.926/ha.) in Dhar. Basal area sq m. in per hectare area has also been found out 1.1815 and 1.2134 in Jhabua and Dhar Forest Divisions for all species.
179. **Masih, S.K. & Tiwari, V. 2013.** "Biodiversity status of Mandla district of Madhya Pradesh". *J. Trop. Forest.* 29(1&2): 54–75. Abstract: An assessment of present biodiversity status in 52 and 54 randomly selected grid points were carried out from east and West Mandla forest divisions. 430 plant species belonging to 300 genera of 97 families were identified and recorded from both the divisions. Plants under different habits namely trees, shrubs, herbs, climbers, epiphytes /parasites and grasses / bamboos are representing 143, 69, 114, 61, 4 and 39 plant species respectively. 28 plants species under RET categories were scrutinized out of which 21 vulnerable, 5 endangered and 2 near threatened recorded from both the forest divisions. Comparative account of biodiversity status of East and West Mandla forest divisions shows that the values of density/ha as well as diversity index of trees, shrubs and herb species are found more in East Mandla forest division than West Mandla forest division. The overall floral biodiversity is recorded higher in East Mandla forest division.
180. **McDonald, T. 1940.** "Bori Reserve 1859-1940". *Indian Forester* 66: 529–543. Abstract: The valuable Bori teak forest were the first in India to be reserved and were visited by well-known forest officers from the earliest days of reservation. The notes which they left and working plans of later years give a fairly complete history of the forests up to date which may be of interest to those who have visited Bori. Fire protection in Bori was probably the earliest in any part of the tropics. The gradual improvement of the forest after the suppression of shifting cultivation is traced through these working plans.



181. **Mishra, D.P. & Sahu, T.R. 1981.** "A contribution to the Euphorbiaceae of Sagar (M.P.) India". *Bull. Bot. Soc. Univ. Saugar* 28: 33–37. Abstract: A total of 43 species belonging to 20 genera of family Euphorbiaceae were recorded from eight surrounding localities of Sagar.
182. **Mishra, D.P. & Sahu, T.R. 1982.** "An artificial key to the Euphorbiaceous genera and species of Saugar". *Bull. Bot. Soc. Univ. Saugar* 29: 45–51. Abstract: A key of 47 species of 20 genera belonging to 3 tribes of family Euphorbiaceae is given on the basis of macroscopic structures, so as to make it an easy approach to identify the plants in field. Two forms of *Euphorbia prostrata* have also been recorded on the oasis of distinct colour appearance of plants.
183. **Mishra, M.&Kotwal, P.C.2007.** "Harvesting decline and economics of Baichandi (*Dioscoreadaemona*) in the natural forest of Central India". *Fl. & Fauna* 13(2): 243–248. Abstract: Baichandi, *Dioscoreadaemona* climbers grow in the tropical dry deciduous forests in India. Local people largely collect Baichandi tubers for domestic (edible) and medicinal purposes in Bhopal and Mandla (E.) forest divisions of central India. This plant is a major source of income to the villagers living adjoining to the forests. The present deteriorating condition of the species is very serious and needs immediate attention. The plant density (3.00/ha) as well as tuber yield (12 55 kg /ha) of this climber were found less in Mandla (E.) forest division while slightly more (Density-4 66/ha) in Bhopal division with tuber yield of 17.78 kg/ha. Unhealthy competition among the villagers was observed for immature harvesting and damage of mother plants while collecting tubers. Due to this tendency no tubers and seeds were left for future regeneration. If control measures are not taken, the species will soon fall into the critically endangered category.
184. **Mishra, O.P. 1991.** "Wetland and aquatic flora of Narmada valley (M.P.)". *J. Econ. Taxon. Bot.* 15(3): 501–527.
185. **Mishra, R.M. & Gupta, P. 2004.** "Phenology of some tree and shrub species of social forestry, Rewa (M.P.)". *J. Trop. Forest.* 20(1&2): 33–37. Abstract: Thirty species of trees and shrubs of social forestry have been assessed for their phenological dynamics at Rewa during 1999-2000. Results indicate that about 70% species showed leaf fall during spring months, 26.6% during hot summer months, and only 3.3% during winter months. At least five flowering patterns have been observed among plant species. Maximum number of plant species (60%) showed flowering during the summer months. About 18.4%, 11.5% and 10% plant species exhibited flowering during post- monsoon, monsoon and winter months, respectively. Some plants showed flowering twice in a year. There appeared to be a kind of relationship between the times of appearance of foliage and flowering. Delayed maturation of fruits (Bradyspory) is observed in most of the plant species of social forestry. Only few species exhibited quick maturation of fruits (Tachyspory).

186. **Mishra, S. & Dubey, S. 2015.** "Morphological study of seeds of *Sida cordifolia* L. in different localities of district Rewa (M.P.), India". *Int. J. Pharm. Life Sci.* 6(6): 4557–4561. Abstract: The present study was undertaken to evaluate the seeds morphology of *Sida cordifolia* L. collected from different localities (Kothi Compound, Civil Lines, A. G. College Campus and Kuthuliya) of district Rewa. *Sida cordifolia* seeds are reniform, about 1.82 mm long and 1.31 mm broad, yellowish brown in colour. The average weight and volume of seeds were noted to be 12.06 mg and 0.97 cc respectively. The maximum seed output capacity was recorded 588.31 in A. G. College Campus and minimum seed output capacity was recorded 403.56 in Kuthuliya (Bichhiya).
187. **Mishra, S. & Mahajan, S.K. 2013.** "Survey of arboreal plants of Nimar ecoregion of Madhya Pradesh, India". *Int. J. For Environm. Rehabilitation and Conserv.* 4(2): 58–63. Abstract: The present investigation deals with the taxonomic enumeration of arboreal plants reported from Nimar eco-region of Madhya Pradesh. Altogether 88 species (85 Dicot and 3 monocot) belonging to 72 genera (69 dicot and 3 monocot) and 38 families (36 dicot and 2 monocot) are reported from this region.
188. **Mishra, T.K., Maiti, S.K., Choudhury, K., Dev, D. & Banerjee, S.K. 2014.** "Vegetation diversity of Rowghat hill (Matla Reserve Forest), a proposed iron ore extraction site in Chhattisgarh state, India". *Ann. Forest.* 22(2): 149–171. Abstract: The vegetation diversity of Rowghat hill (Matla Reserve Forest), a proposed iron ore extraction site of Chhattisgarh state has been studied. The sample site (314 km<sup>2</sup> in spatial scale) houses 96 trees, 47 shrubs, 118 herbs and 6 epiphytic species i.e. 267 species of phanerogams in total. All these species are distributed within 64 families. The forest also has a lot of lichens both on the tree trunk as well as on rocks indicating very significant air pollution. Out of the 96 tree species, 57 are found in considerable amount in the forest area and contribute towards relative dominance of the forest community. Relative density suggests that the forest is highly heterogenous and *Shorea robusta* co-dominates with *Cleistanthus collinus* in the tree layer. Tree diversity is maximum in the northern aspect of the hill followed by the western aspect. Top of the hill has least tree diversity. In the shrub level, northern aspect exhibits least diversity of the species, whereas the herb level, diversity is much more and higher than southern and eastern aspects. The results indicate that the western aspect of the hill is more diverse in floristic species composition and next to it comes the northern aspect. Some recommendations have been made to mitigate the stress on the environment to the extent possible during proposed mining operation.
189. **Misra, O.P. 1990.** "Additions to the flora of Amarkantak (M.P.)". *J. Econ Taxon. Bot.* 14(1):198–200. Abstract: The paper deals with the additions to the Flora of Amarkantak, which have not been reported earlier from this area.
190. **Misra, R.1953.** "Vegetation of Chatera". *Bull. Bot. Soc. Univ. Saugar* 3: 12–18.

191. **Misra, R. 1956.** "The vegetation of Amarkantaka". *Bull. Bot. Soc. Univ. Saugar* 8(1): 34–37. Abstract: The vegetation of Amarkantaka has 5 natural aspects viz., 1. Dense *Shorea robusta* forests on the ridges and the slopes; 2. Open miscellaneous forests; 3. Thorn scrub; 4. Grasslands; 5. Marsh and 6. Aquatic.
192. **Misra, R. 1957.** "The vegetation of Sagar, M.P.". *J. Indian Bot. Soc.* 36: 600–601.
193. **Misra, R. & Joshi, N.K. 1952.** "The forest complex of Patharia hills, Sagar". *J. Indian Bot. Soc.* 31: 154–170.
194. **Moghe, S. & Dubey, V. 2017.** "Floristic analysis and phenological behaviour of weeds of rice crop of Bilaspur (C.G.)". *Life Sci. Bull.* 14(1): 9–12. Abstract: A survey of weed flora of rice crop fields was done during 2011–2015 at the pick point of weed growth around Bilaspur selecting Sakari, Domuhani and Birkona as study sites. Data was analysed floristically and it was found that weed flora of rice field was distributed in 50 species of seed plants belonging to 13 dicots and 3 monocots families. One pteridophyte was also reported. Dicot/Monocot ratio was 4.33:1 for rice weed flora. Seasonal variations in various phenological events of these weeds were also observed and expressed in terms of phenograms.
195. **Mooney, H.F. 1942.** "A sketch on the flora of Bailadilla range in Bastar State". *Indian Forest Rec., Bot. (n.s.)* 3(7): 197–253.
196. **Mooney, H.F. 1944.** "A list of plants recorded from the parts of Ranchi and Palamau districts and the States of Jashpur and Surguja". *J. Roy. Asiatic Soc. Bengal* 10: 59–118.
197. **Mudgal, V. & Khanna, K.K. 1995.** "Zingiberaceae in Madhya Pradesh". *J. Econ. Taxon. Bot.* 19(3): 703–717. Abstract: The paper deals with a taxonomic account of family Zingiberaceae in Madhya Pradesh. A total of eight genera and twenty three species are described from the state. Their correct nomenclature, synonymy, detailed description, phenology, distribution, uses and notes, if any, are presented in the paper along with artificial keys to genera and species.
198. **Mudgal, V., Khanna, K.K. & Hajra, P.K. 1997.** *Flora of Madhya Pradesh*, Vol. II. Angiosperms (Primulaceae to Ceratophyllaceae). Botanical survey of India, Calcutta. Abstract: The flora deals with the systematic analysis of 792 species belonging to 320 genera and 51 families (Primulaceae to Ceratophyllaceae).
199. **Mujaffar, S. 2012.** "Study on flora of East Nimar Region, Madhya Pradesh". *Life Sci. Bull.* 9(1): 187–190.
200. **Mukherjee, A.K. 1984.** *Flora of Pachmarhi & Bori Reserves*. Botanical survey of India, Howrah. Abstract: The flora deals with the systematic analysis of 778 species belonging to 452 genera and 101 families. The species consist of 247 trees and shrubs and 531 herbs. In addition, data are provided on forest types, phytogeographical and statistical analysis.

201. **Mukherjee, A.K. 1985.** "Effect of MIC (Methyle isocyanate) on the flora of Bhopal". *J. Econ Taxon. Bot.* 7(3): 568–572. Abstract: Three weeks after the Methyle Isocyanate (MIC) gas disaster of Bhopal, in the night of December 2-3, 1984, the author observed that the leaves of a number of species were wilted totally and the others partially. But four species namely, *Ficus benghalensis*, *Mangifera indica*, *Artocarpus integrifolia* and *Casuarina equisetifolia* were found to be completely resistant to the gas. Though December-January is the resting period for meristem activities the pollution stress had triggered it into untimely activity for regeneration of new leaves in most of the species except *Ficus religiosa*, *Pongamia pinnata*, *Moringa pterygosperma*. It was observed in the first week of May, 1985, that all the leaves regenerated after the MIC disaster had been shed before the development of normal, healthy spring leaves. The condition of flowering and fruiting was not normal in most of the species except *Phoenix sylvestris* & *Melia azedarach*. Flowering was normal in *Delonix regia* and *Cassia fistula*. Cultivated vegetable species showed that the toxic effect of the gas on soil had disappeared. The condition of *Eichhornia crassipes* indicated that the toxic effect was persisting in the aquatic system. From the pollution symptoms on plants it appeared that the effect of the gas was more near ground level at J.P. Nagar, which is nearer the source than the Railway Colony, 2 km away, where the effect was more in the upper layer. The four resistant species, mentioned above, may be utilized for creating plant barrier around industries in particular and industrial towns in general.
202. **Murti, S.K. 1975.** "Aliens naturalised in Flora of Bilaspur, M.P.". *Bull. Bot. Surv. India* 17(1-4): 87–96. Abstract: The present paper deals with 68 exotic species of flowering plants which are naturalised in the flora of Bilaspur, Madhya Pradesh. These species were collected during three seasonal field-collection tours undertaken from 1970 to 1973 and have been deposited in the herbarium of Central Circle, Botanical Survey of India, Allahabad (BSA). Short notes on habitat, nativity etc. are appended with most of the species. The 68 species have been put into 5 major groups according to their nativity viz., 1. Neo-tropical, 2. North temperate, 3. North-African, Afro-Asian and Arabian, 4. Tropical and South-African and 5. Austro-Asian.
203. **Murti, S.K. 1976.** "Contribution to the flora of Madhya Pradesh— New records of species". *Bull. Bot. Surv. India* 18(1-4): 210–212. Abstract: The paper deals with five species viz., *Cleistocalyx operculatus* (Roxb.) Merrill & Parry, *Desmosoium benthamii* Ohasi, *Eusteralis stellata* (Lour.) Panigrahi, *Ludwigia prostrata* Roxb. and *Plantago pumila* Willd. have been reported for the first time from Madhya Pradesh. Notes on their flowering and fruiting time, ecology and distribution has also given.
204. **Murti, S.K. & Panigrahi, G. 1999.** *Flora of Bilaspur district (Madhya Pradesh)*. Vol. 2. Botanical Survey of India, Calcutta. Abstract: The present book deals with 442 taxa of angiosperms belonging to 255 genera and 55 families.

205. **Narayanaswamy, V. & Rao, R.S. 1960.** "A contribution to our knowledge of the vegetation and flora of the Pachmarhi plateau and the adjacent regions". *J. Indian Indian Bot. Soc.* 39: 222–242.
206. **Nath, V, Rao, N.R., Gupta, S. & Upadhyay, S.K. 1993.** "Check list of ligneous resources of TFR campus". *Indian J. Trop. Biodiv.* 1(1): 51–62. Abstract: This paper deals with a list of 150 ligneous resources of Tropical Forest Research Institute campus, Jabalpur based on systematic survey and study of the area. All the taxa have been identified and latest nomenclature, family, habit, vernacular names and their uses if any, have been enumerated.
207. **Naugraiya, M.N. 2017.** "Performance evaluation of Bamboo species in Chhattisgarh plains". *J. Trop. Forest.* 33(1): 18–25. Abstract: Chhattisgarh is known for large tribal population and dense forest covering 46 per cent of the land area, and spread over in three distinct agro-climate zones viz. Southern Baster Plateau, Northern Hills and Central Plains. In the present study, saplings of six bamboo species viz., *B.bambos*, *B. nutans*, *B. polymorpha*, *B. vulgaris*, *B. striata* and *D. strictus*, prepared from nodal cuttings, were planted at a spacing of 5 m on the boundary of experimental farm and also in the nursery area of Dr. Richharia Research Farm, Baronda located in Chhattisgarh plains. Life saving weekly irrigation was provided in the boundary plantation during the summer season i.e. from April till the onset of monsoons in June, whereas in the nursery area plantation, irrigation was given twice a week throughout the year. Bamboo plantations raised in the nursery area showed 100% survival while in the boundary plantation, it was recorded 100% in *B. striata* and *B. bambos*, 94.9% in *B. vulgaris*, 85% in *B. bambos* and minimum 81.6% in *B. polymorpha*. However, culm formation in a clump was found the best in *D. strictus*, followed by *B. bambos* at both the sites. Growth in culm height ranged between 229.25 to 482.4cm at the nursery site in order of *B. nutans* > *B. polymorpha* > *B. vulgaris* > *D. strictus* > *B. striata* > *B. bambos* while at the boundary site, it ranged between 100.5 and 262.29cm in the order of *B. vulgaris* > *D. strictus* > *B. polymorpha* > *B. striata* > *B. nutans* > *B. bambos*.
208. **Nautiyal, S., Totey, N.G., Singh, A.K. & Bhomik, A.K. 1987.** "Forest vegetation survey of south Raipur division, M.P.: A quadrat analysis". *Indian J. Forest.* 10(1): 16–18. Abstract: The standard quadrat size of 20 m x 20 m was found suitable for study of trees, 3 m x 3 m for shrubs and sapling and 1 m x 1 m for regeneration and herbs of dry deciduous forest of south Raipur Forest division, M.P.
209. **Nautiyal, S., Khatari, P.K., Chouhan, J.S. & Totey, N.G. 1993.** Floristic composition of south Raipur Forest Division, M.P.- I. In: Gupta, B.K. (ed.), *Higher Plants of Indian Subcontinent*. Vol. IV (*Indian J. Forest., Addit. Ser. VII*). Bishen Singh Mahendra Pal Singh, Dehra Dun. Pp. 267–280. Abstract: In the present paper 178 plant species has been collected from Raipur Forest Division of Madhya Pradesh.

210. **Nema, M., Modak, M. & Soni, V. 2012.** "A comprehensive floristic study of Bhopal district with special reference to family Acanthaceae". *Int. J. Life Sci. & Med. Sci.* 2(1): 8–10. Abstract: Bhopal is known as the City of lakes. It has some hilly tracks covered with luxuriant vegetation along with fertile plateau suitable for cultivation of a number of crops. Apart from this, the forest area is represented by mixed deciduous forest. Taxonomical investigation were undertaken to explore the floristic status of the family Acanthaceae growing throughout the Bhopal district. The family is one of the advanced and specialized families with most of the plants, herbaceous. A number of plant species also have significant medicinal value.
211. **Oommachan, M. 1966.** "Ecology and systematic of vegetation of Bhopal. The rainy season plants". *Proc. School Pl. Ecol.* 193–208.
212. **Oommachan, M. 1977.** *The Flora of Bhopal (Angiosperms)*. J.K. Jain Brothers Publ., Motia Park, Bhopal.
213. **Oommachan, M. 1977.** "Studies on the Lamiales of Bhopal and the adjacent regions". *Geobios (Jodhpur)* 4: 57–58.
214. **Oommachan, M. & Billore, K.V. 1969.** "Asteraceae of Bhopal (Madhya Pradesh)— A systematic study". *Bull. Bot. Surv. India* 11(1&2): 35–40. Abstract: The present paper deals with the systematic study of 28 genera and 35 species of the family Asteraceae growing in Bhopal area. An artificial key to all the species based on achene characters, which are also illustrated by line drawing, has been given. A table showing distribution of the species in the area under study is added.
215. **Oommachan, M. & Dwivedi, R. 1975.** "Studies on the winter season plants of Bhopal". *Geobios (Jodhpur)* 2: 169–173.
216. **Oommachan, M. & Khan, A.H. 1976.** "Studies on the summer season plants of Bhopal". *Geobios (Jodhpur)* 3: 84–87.
217. **Oommachan, M. & Khare, R. 1976.** "Studies on the unisexuales of Bhopal and its contiguous regions in Madhya Pradesh". *Geobios (Jodhpur)* 3: 207–208.
218. **Oommachan, M. & Masih, S.K. 1992.** "Contribution to the flora of Pachmarhi— A reassessment". *J. Econ. Taxon. Bot.* 16(2):437–445. Abstract: Regular observations and survey conducted at Pachmarhi from 1982 to 1989. 909 angiospermic plant species belonging to 111 families have been identified. 163 species are new reports. 12 families are also new to this region. The ratio of Dicot:Monocot is 3:1. The ten dominant families on the basis of species numbers are Poaceae (104), Fabaceae (92), Asteraceae (58), Acanthaceae (44), Euphorbiaceae (43), Cyperaceae (42), Orchidaceae (26), Scrophulariaceae (25), Lamiaceae (25) and Rubiaceae (23).
219. **Oommachan, M. & Shrivastava, J.L. 1986.** "Three new hosts of *Dendrophthoe falcata* (L.f.) Etting from Madhya Pradesh forests". *J. Trop. Forest.* 2(1): 74–76. Abstract: A total of 27

- host plants of *Dendrophloe falcata* out of which 3 plants, viz., *Emblia officinalis* Gaertn. (Euphorbiaceae), *Salix tetrasperma* Roxb. (Salicaceae) and *Terminalia arjuna*(DC.) Wight & Arn. (Combretaceae) has been recorded as new host from different regions of Madhya Pradesh.
220. **Oommachan, M. & Shrivastava, J.L. 1988.** "Studies on flora of Jabalpur district (Madhya Pradesh)" *Bull. Bot. Surv. India* 30(1-4): 140–145. Abstract: The present studies on Flora of Jabalpur district has revealed many interesting facts about 880 plant species belonging to 456 genera and 135 families of Angiosperms. The ratio of Dicots to Monocots is 5:1. Many are rare and ethnobotanically interesting plants with a goods number of endemic new reports to the region. Throughout the district degradation of vegetation is observed due to deepseated influence of biotic and anthropogenic elements.
221. **Oommachan, M. & Shrivastava, J.L. 1996.**"Flora of Jabalpur". *J. Econ. Taxon. Bot., Addit. Ser.* 13: 1–354. Abstract: In the present paper 933 species belonging to 585 genera under 139 families has been reported from Jabalpur. Within this 933 species 188 belongs to monocots and remaining 745 dicots.
222. **Oraon, P.R. Jhariya, M.K. 2018.** "Regeneration and species status in Boramdeo Wildlife Sanctuary of Chhattisgarh, India under different anthropogenic disturbance regimes". *Bull. Environm. Pharmacol. & Life Sci.* 7(4): 30–36. Abstract: The present work is done in the protected area of Kawardha (Boramdeo Wildlife Sanctuary) forest division (Chhattisgarh), India to assess the abundance, species distribution and regeneration status under different level of disturbance regimes. The floristic survey was done in three circles of sanctuary each having three levels of disturbance regimes. A total of 43 species across the sanctuary area were encountered. Overall highest species were recorded in Jamunpani circle (31) followed by Boramdeo (30) and Salhewara circle (25). The sapling layer reflected 36 different species across the circle in different sites of the sanctuary area. A sum of 30 species was documented in the seedling layer among the different sites and circle of the sanctuary area. The species richness across the site showed least diversity for Salhewara circle. The rare class was prevalent in the sanctuary area and the species with high occurrence was almost negligible. The regeneration potential was found to be decreased as the level of anthropogenic disturbances increased. The findings of the study reflected differences in abundance, species distribution and regeneration status in highly disturbed sites compared to least disturbed site in different circle. Therefore, proper monitoring, documentation and subsequent management implication is needed for the conservation of these valuable forest resources.
223. **Pancholi, A. & Chouhan, S. 2011.** "Seasonal variations of aquatic biota of Sanjeevani water reservoir, Neemuch (M.P.)". *Life Sci. Bull.* 8(1): 67–68. Abstract: In the present paper a successful attempt has been made to study the occurrence and seasonal variations

of planktons at Sanjeevani water reservoir, Neemuch (M.P.). Total 31 species of planktons belonging to 19 species of phytoplanktons and 12 of zooplanktons were recorded. The plankton population showed seasonal variation in the study.

224. **Pande, P.K., Singh, J., Meshram, P.B., Banerjee, S.K. & Pal, M. 2004.** "Phenological studies on *Azadirachta indica* A. Juss. (Neem) of satpura and adjacent agro-climatic zones of Madhya Pradesh (India)". *Indian Forester* 131(3): 273–282. Abstract: Phenological studies on *Azadirachta indica* A. Juss (Neem) of different agro-climatic zones viz., Narmada Valley, Vainganga valley and Satpura plateau are described. Major leaf-fall period fell between February-March except in Narmada valley where it was extended up to April. Leaf emergence initiated during February-April in different agro-climatic zones. Vegetative phase lasted for seven months (August-January) in all climatic zones except Vainganga valley where it lasted for six months only. Flowering initiated in February in all the climatic zones while in Narmada valley, it was noticed during March. Fruiting was initiated during March-April. The impact of climate was observed on the morphological and phenological characteristics of Neem. The significant variations among the quantitative phenological parameters like leaf-, flower-, fruit-abundance, leaf area, leaflet-area and leaf-weight for different climatic zones. These variations were non-significantly correlated with growth parameters like gbh, tree-height, crown diameter and crown-height. Significant positive correlation between flower- and fruit-abundance was obtained which indicated that increasing flower-abundance enhanced fruit production.
225. **Pandey, H.N., Dakwale, R.N. & Mishra, G.P. 1976–1977.** "The grasses of Sagar district I". *Bull. Bot. Soc. Univ. Saugar* 23&24: 1–20. Abstract: This paper gives a taxonomic account of the grasses of Sagar (a district of Madhya Pradesh) and its adjoining areas within a radius of about 50 km. It has been possible to collect and work out 70 genera and 125 species belonging to 3 tribes of *Panicoideae* and 13 tribes of *Pooideae*. Species of tribes *Andropogoneae*, *Paniceae*, *Eragrostae* and *Chlorideae* were found to be abundant in this area. Keys to the tribes, subtribes, genera and species have been given along with brief ecological notes on habit, habitat, locality, flowering season and herbarium sheet number of each species.
226. **Pandey, H.N., Dakwale, R.N. & Mishra, G.P. 1980.** "The grasses of Sagar District II". *Bull. Bot. Soc. Univ. Saugar* 27: 7–15. Abstract: The detailed taxonomic and ecological survey of the tribe *Paniceae* belonging to group *Panicoideae* has been described in this paper. In this tribe 30 species of 13 genera have been worked out from this district.
227. **Pandey, P., Bhandari, A. & Pandey, B. 2014.** "Ecological status of weed flora found in Bhilai Nagar". *Indian J. Sci. Res.* 4(1): 115–120.
228. **Pandey, P.K. 2005.** "Ecological assessment of vegetation in JFM adopted village-Forests in Satpura plateau, Madhya Pradesh". *Indian Forester* 131(1): 97–114. Abstract:



Vegetation was analysed quantitatively in nine village forests in Madhya Pradesh, viz., Ankhabadi (Site-I), Moyakui (II), Amajhiri (III), Ataria (IV), Gratea (V), Gangai (VI), Akalma (VII), Churasajwa (VIII) and Bheda (IX) of East Chhindwara Forest Division (Madhya Pradesh). These forests are managed under Joint Forest Management Programme. Sites III and V were highly and least disturbed sites in the past. Current disturbances were higher at sites I, II, VIII and lower at sites III and IX. Current disturbances are positively related with adult tree density. Total density for tree layer ranged between 46.93 (V) to 387.5 (IX) tree ha<sup>-1</sup>; 156 (VIII) to 714.95 (IV) for shrubs and 15905 (VIII) to 102078 (IX) plant ha<sup>-1</sup> for herb layer, whereas the range of dominance (cm<sup>2</sup> ha<sup>-1</sup>) was 9570 (VI) to 217333 (I) for trees; 2912 (II) to 32462 (VI) for shrubs and 1304 (VIII) to 218468 (VII) for herbs. Shannon-Weiner diversity index ranged between 1.19 (VIII) to 1.98 (V) for trees; 1.19 (VIII) to 1.89 (IV) for shrubs and 1.40 (I) to 2.24 (III) for herbs. Highest tree diversity was recorded at highly disturbed site (V). Sites V and IX were more similar sites, whereas, sites I and VIII were most dissimilar sites. Concentration of dominance showed reverse trend to diversity index. Present and past disturbances adversely affect the regeneration and composition of different tree species at different sites.

229. **Pandey, R.2018.** "Ecological diversity of certain herbs of Rewa district Madhya Pradesh". *Int. J. Bot. Stud.* 3(1): 33–38. Abstract: Ecology is the interrelationship between organisms and their environment. The environment includes climatic, edaphic and biotic factors and it determines the distribution, prevalence, competing ability, behaviour and survival of the plant. During present investigation the phytosociological experiments were made in three selected study sites. The 43 associates was observed in Kuthulia and Padra locality where 41 associates was noted from Saman locality. The *Ageratum conyzoides* is recorded as dominant associates by calculating the IVI 7.612, 8.16 and 8.138 in all the selected sites viz., Kuthulia, Padra and Saman respectively. While the highest IVI of *Bidens pilosa* was observed 2.816, 2.694 and 1.499 in all localities. The highest IVI of *Ageratum conyzoides* was noted in Saman locality and highest IVI of *Bidens pilosa* is also Padra locality. It is due to some invasive plants are so successful in new environments may be that they bring novel mechanisms of interactions with the recipient community.
230. **Pandey, R.K.2016.** "Challenges for conservation and sustainable use of wild medicinal plants in natural forest ecosystems in India". *J. Trop. Forest.* 32(1): 1–18. Abstract: India, due to wide range of physical features and climatic conditions, has diverse ecological habitats and various forest types. India's forests are, therefore, home to rich floral and faunal biodiversity. Medicinal and aromatic plants (MAPs) and other non-timber forest produce (NTFPs) constitute most of the floral biodiversity. Forests are main source of sustenance and livelihood to forest fringe rural, especially tribal, communities who eke out their living by gathering and selling these forest products. Increasing demand and market access of commercially important MAPs and other NTFPs have led to unregulated,

unsustainable and destructive harvesting, resulting into resource depletion. India is a signatory to the global Convention on Biological Diversity (CBD) and the National Forest Policy (1988) also puts emphasis on the conservation of biodiversity and meeting the demands of forest-dependent communities for forest products. Loss of biodiversity is intricately linked with forest degradation and the current situation in this regard is a source of concern. Sustainable use of forest resources is essential for biodiversity conservation and maintenance of various eco-system services which are vital for the survival of all living beings on the earth. It is now being increasingly realised that no conservation efforts can succeed without the active involvement of local communities who are the major stakeholders. It is in the light of this realization that the concept of 'participatory forest management' or 'joint forest management (JFM)' or 'co-management' has been adopted throughout the country. However, several studies conducted to assess the state of affairs in JFM areas have revealed that efforts for the protection of forests and conservation of biodiversity are still one-sided and involvement of local communities is totally lacking. Poverty, marginal agriculture, increased market demand for MAPs and other NTFPs, ineffectual leadership, lack of motivation and awareness, local politics, breakdown of rule enforcement and absence of secure and enforceable exclusive-use rights have undermined community institutions and left natural resources plundered and exploited beyond the limits of their regenerative capacities. Prevailing harvesting practices are often destructive and wasteful. State Forest Research Institute (SFRI), Jabalpur and several other research institutions have developed scientific sustainable harvesting techniques and worked out sustainable harvesting limits (SHLs) for a number of MAP and other NTFP species with active involvement of local communities. However, there is a need for dissemination of these developed techniques at the field level. Some important initiatives like establishment of people's protected areas (PPAs) and community conserved area (CCAs) have been taken in Madhya Pradesh and other states adopting community-oriented integrated eco-system approach for conservation and sustainable utilization with limited success and much remains to be done at this front. Lack of consistency in such efforts has been noticed. An integrated approach involving active participation of user communities in the management of NTFPs and development of skills and capacities of the user communities and frontline staff of forest department by organising trainings in identification of potentially rich NTFP areas in natural forests, resource inventory, regeneration survey, identification of harvestable species and areas, species-specific sustainable harvesting limits and non-destructive harvesting techniques seem to be the only workable strategy for reversing the trend of depletion. Generation of awareness about the adverse consequences of over-use and destructive methods of harvesting on sustainability should be an essential component of capacity building training programmes.

231. **Pandey, R.K. & Namdeo, P. 2009.** *Floral Diversity of Kanha Tiger Reserve*. Director, State Forest Research Institute, Jabalpur (M.P.). Abstract: 853 species of 506 genera

belonging to 132 families has been recorded from Kanha Tiger Reserve. Out of 853 species 22 species belongs to Pteridophytes, 2 from Gymnosperms and rest 829 belongs to angiosperms. Within this 829 species of angiosperms 226 species belongs to monocots and rest 603 from dicots.

232. **Pandey, R.K. & Saini, S.K. 2004.** "Drosera burmannii: A species under stress in natural tropical forest ecosystem in Madhya Pradesh". *J. Econ. Taxon. Bot.* 28(2): 494–496. Abstract: Annual herb *Drosera burmannii* Vahl., is sparsely distributed in a specific marshy habitat in open pockets of forests of Madhya Pradesh. During the resource assessment survey in People's Protected Areas (PPA), it is observed that the species is under threat due to prevailing biotic factors. Moreover, due to lack of appropriate conservation measures in *in-situ* conservation, this rare insectivorous plant species is struggling for existence. Considering the taxonomic and ethnic value, adequate management interventions are needed to conserve this species in their natural habitat in Madhya Pradesh.
233. **Pandey, R.K. & Saini, S.K. 2006.** "Depleting status of *Bauhinia vahlii*: Threat to the livelihood of dependent tribes of Eastern Madhya Pradesh". *J. Trop. Forest.* 22(1&2): 13–16. Abstract: In Madhya Pradesh, tribal and rural communities have been engaged in the collection of NTFPs from natural forests since time immemorial. In last few decades, it has been observed that due to commercialization of herbal plants, most of the plant resources are being overexploited and their status has declined in natural forests. It has been observed that *Bauhinia vahlii* contributes the maximum to the total annual income of the people of the area among all NTFPs. Status of *B. vahlii* was found very critical in the natural forests of Dindori division. *B. vahlii* is a giant woody climber of tropical forests. Due to impact of over exploitation, this species is now found in deteriorating condition and this species has changed to 6–7 feet high bushy form only. This manipulation in size of the plant is due to over use of plant parts as bark of the plant is used for making rope and leaves have commercial market. Furthermore, *B. vahlii* plant shows poor status and loss of vigour has been observed in the plants which also affects the flowering and fruiting conditions of the plants in the area. In this study, attempts are being made to assess the harvesting trend of this economically important species in *in-situ* condition and to find out ways and means for conserving it in its natural habitat in Dindori division of Madhya Pradesh.
234. **Pandey, R.K. & Saini, S.K. 2011.** "Threat of invasive alien species on forest resources in tropical forests of Central India". *J. Trop. Forest.* 27(1): 49–56. Abstract: Bioclimate of tropical forests of India provide congenial habitats for invasive alien species. *Lantana camara*, *Parthenium hysterophorus*, *Zornia* spp., *Xanthium stumarium*, *Eupatorium glandulosum*, etc. are the common exotic invasive species have invaded and spread over the forest localities of almost all forest types of the country. Owing to aggressive nature of exotic

invasive species, degraded and open forests are captured by replacing indigenous floral genetic resources of forest ecosystem. Tropical forests of India are not only abode of wide range of floral and faunal diversity but also play a vital role in livelihood security of forest dependent rural and tribal communities. Observations revealed that invasive species have detrimental impact on *in-situ* conservation of indigenous biodiversity and livelihood security of rural people who live in and around the forests. Population and production of several commercially important medicinal and other NTFPs species of herb and shrub categories have been found to be replaced by colonization of *Parthenium hysterophorus* and *Lantana camara* in tropical forests of Central India. About 83 percent of indigenous commercially important NTFP species have been observed to wipe out from the forest floor in *Parthenium hysterophorus* and *Lantana camara* infested localities (Pandey and Saini, 2002). Prevailing biotic factors i.e. grazing, fire, deterioration of forest cover, over exploitation of utilizable forest resources are accelerating the colonization of *Parthenium hysterophorus* in forest ecosystem. So far no systematic study has been done on the cause, rate of invasion and distribution, preventive management system, assessment of impact on indigenous native species. There is an urgent need to develop suitable strategy to assess the severity of adverse impact on existence of native species and its management on forest resources. The present study highlights the impact of *Parthenium hysterophorus* and *Lantana camara* on indigenous biodiversity particularly, commercially important NTFPs which are the main source of livelihood of forest dependent tribal communities in ecological, economic and social terms in natural tropical forests of Central India.

235. **Pandey, R.K. & Saini, S.K. 2014.** "Sustainable harvesting of leaves of *Bauhinia vahlii* as a source of livelihood to rural tribal communities in tropical forests of Madhya Pradesh". *J. Trop. Forest.* 30(4): 19–29. Abstract: Conservation of commercially important forest resources in state owned natural tropical forests is a challenging task as local people have the right of free access for collection of non timber forest products (NTFPs). Owing to increased commercial utilization of forest resources, local user communities are encouraged to overexploit forest products due to competition among the communities, ignoring the traditional practices of sustainable harvesting of utilizable resources from natural forests. In the prevailing forest management system, extraction of NTFPs is not at all sustainable either in ecological or in socio-economic terms. NTFPs play an important role in providing subsistence to local communities. But in recent studies, it has been noticed that there is no systematic plan for extraction of NTFPs due to which the NTFPs are harvested in a destructive manner. It is now a common practice to simply cut forest trees to harvest fruits or bark. This practice is under no circumstances sustainable and it can have drastic impact on the distribution and abundance of fruit or bark resources within a forest. Forest management for harvesting of non-wood forest products requires comprehensive research and planning. To implement this idea, participatory approach

involving local forest dependent user communities seems to be inevitable for sustainable management and in-situ conservation of valuable forest resources. Therefore, for this purpose, a study was conducted in tribal dominated Dindori district of Madhya Pradesh where leaves of *Bauhinia vahlii* species are harvested by local communities. These leaves are utilized for making cups and plates and form an important resource base for subsistence of these communities. User communities generally cut the woody climber upto their height for easy accessibility and debark the plant, as the bark of the climber is also used as rope. Continuous destructive and over-harvesting of leaves and bark of the plant poses threat to even its existence in natural forests. Every NWFP resource has a site specific maximum sustainability level of harvest. If this harvest level is exceeded, the plant populations that are being exploited, as well as the faunal community that depends on it, will be adversely affected. Therefore, in the present study, attempts were made to determine the sustainable harvesting limit of leaves of *Bauhinia vahlii* in forest area of FPC (Forest Protection Committee), Kodwari in.

236. **Pandey, R.K., Kandy, A.K. & Kotwal, P.C. 1985.** "Ecological studies of Kanha Wildlife National Park, India. I. History, distribution and structure of the Grasslands". *J. Trop. Forest.* 1(3): 198–216. Abstract: After an extensive survey of the 38 grasslands distributed in four ranges of the park viz., Supkhar, Mukki, Bhaisanghat and Kanha, it was found that 16 types of plant communities were prevailing in them, *Heteropogon contortus*, *Themeda quadrivalvis* and *Dichanthium annulatum* were the dominant species in most of the grasslands. Beyond these, other co-dominant species were *Themeda triandra*, *Eragrostis unioides*, *E. tenella*, *Imperata cylindrica*, *Iseilemalaxum* and *Dimeria ornithopoda*. However, including legumes and forbs, total number of species in different ranges varied from 35 to 32 and in a single grassland from 8 to 32. Importance value Indices of all species are presented for each grassland separately.
237. **Pandey, R.K., Kandy, A.K. & Kotwal, P.C. 1986.** "Ecological studies of Kanha Wildlife National Park, India. V. Biotic impact and successional relationships of the grasslands". *J. Trop. Forest.* 2(2): 131–145. Abstract: Grazing and burning factors have appeared responsible for progressive and regressive changes within 16 plant communities of 38 grasslands of Kanha Wildlife National Park. Investigations revealed that density and diversity of plant species were greater in the communities of later successional stages than those in the earlier ones. *Dichanthium annulatum*- *H. contortus* and *H. contortus* – *Iseilemalaxum* were observed to be pioneer communities, dominating in recently abandoned arable lands of the study area. Proportion of palatable plant species was found to be higher in grasslands in early to middle successional stages and supporting wide variety of wild animals. *Saccharum spontaneum*- *Eragrostis unioides* community was considered to be regressive community under the pressure of grazing and burning. It became apparent at the investigation that each animal had its own preferences for particular community type. Chital and Langur were the commonest and the most widely

distributed animals found in all communities. Barasingha was observed to be localized in *Saccharumspontaneum* dominating grasslands. Gaur and Sambar being forest dwellers, were frequently encountered in early to middle successional grasslands. Barking deer and Four-horned antelope were frequently observed in the grasslands of plateaux. A possible pathway of successional relationships among 16 plant communities of the area is also suggested in the paper.

238. **Pandey, R.K., Kandya, A.K. & Kotwal, P.C. 1986.** "Ecological Studies of Kanha Wildlife National Park, India III. Utilization of Grassland habitat by three common wild ungulates". *J. Trop. Forest.* 2(4): 230–240. Abstract: A study of the utilization of grasslands by three common ungulates of Kanha Wildlife National Park (KWNP) is presented in this paper. The animals watched for this purpose are Chital (*Axis axis*), Barasingha (*Cervusduvaucelibranderi*) and Blackbuck (*Antilope cervicapra*). Utilization of grassland is done by these animals for feeding purpose whereas they move into the surrounding forests for shelter. Feeding activity of different ungulates showed two grazing peaks every day, i.e. one just after the sun-rise and other at the sunset. These grazing peaks were observed invariably in all the three seasons, viz., winter, rainy and summer. It was also observed that the animals preferred to remain at the ecotone of the grassland and forest for most of the time. Thus, they could use the forest cover at the time of heavy rains. They also relaxed there in the noon time of hot summers. However, in morning and evening hours, they remained grazing in the grasslands.
239. **Pandeya, S.C. 1948-1949.** "An ecological study of the vegetation of Saugar University grounds". *Bull. Bot. Soc. Univ. Saugar* 1 (1 & 2): 3–5. Abstract: The present study conducted during the years 1947-49 deals with such a type obtainable at Makronia plateau. The status of the grassland vegetation in the area is a disclimax in the terms of Weaver and Clements (1929). A detailed study of the grasslands is in progress with a view to prescribe their management for controlled exploitation.
240. **Pandeya, S.C. 1949-1950.** "Flora of the University area and neighbourhood I. Trees and Shrubs". *Bull. Bot. Soc. Univ. Saugar* 2(1 & 2): 16–23. Abstract: The area dealt within this study covers mainly the Makronia plateau (Saugar University ground), Makronia village and the neighbouring crop fields, and also includes the road side trees. The study does not include, at present, the flora of the hillock situated on the other side of the Narsinghpur road. The planted trees and shrubs of the University Botanical Garden have been excluded. In the present paper 20 species has been reported along with their citation, description, vernacular name and uses.
241. **Pandeya, S.C. 1951-1952.** "Succession in grasslands of Sagar, Madhya Pradesh". *Bull. Bot. Soc. Univ. Saugar* 1 & 2: 3. Abstract: Attempts have been made to study the succession of grasslands of Sagar. Primary and secondary successions together with retrogressive stages have been described in detail.

242. **Pandeya, S.C. 1952.** "Grasslands of Sagar, Madhya Pradesh". *Indian Forester* 78: 638–654. Abstract: The Makronia plateau to the east of Sagar, Madhya Pradesh. The plateau is built of the Deccan trap formed towards the close of the Cretaceous age. The climate is markedly periodic. The habitats are classified according to the topography. The plant communities found on each type of habitat is described. Variability with regard to rooting depth, leaf area and size, and height of six perennial species is shown in relation to soil and climatic season. *Tridax procumbens* is probably a calcicole growing gregariously along buildings. *Themeda caudata* is strongly seasonal perennial having optimum phase of growth in the rainy season. *Trichodesma indica*, *Dichanthium annulatum*, *Indigofera linifolia* and *Heylandia latebrosa* seems to be governed by the water content of the soil which in turn depends upon its texture, depth and limit content.
243. **Pandeya, S.C. 1952-1953.** "Flora of the university area and neighbourhood". *Bull. Bot. Soc. Univ. Sagar* 2: 16–23; 3: 32–38.
244. **Pandeya, S.C. 1961.** "Ecology of grasslands of Sagar, Madhya Pradesh". *J. Indian Bot. Soc.* 40: 592–600. Abstract: An attempt has been made to present an ecological monograph of the grasslands lying in the suburb to the east of Sagar (Madhya Pradesh). The work comprises detail studies of the analytic and synthetic characters of the grasslands and environmental factors operating upon them. Situation, topography and climate of the area have been given. The present paper being first in the series presents a grassland map of the area showing the existing distribution of grassland associations. Eight main associations have been recognised. The investigations are first of the type in India.
245. **Pandeya, S.C. & Jain, N.K. 1966.** "Studies in the foliar analysis of Sal (*Shorea robusta* Gaertn. f.) and the physico-chemical status of the underlying soils in Madhya Pradesh". *Bull. Bot. Surv. India* 8(2): 108–116. Abstract: The paper describes the foliar analysis of Sal (*Shorea robusta* Gaertn. f.) and the physico-chemical status of soils under the respective sal forests of Madhya Pradesh. The soils are fresh, immature to leached down ones. The best growth of sal, as determined by Relative Growth Index (RGI- a new concept) is base poor, leached-down sandy loams. Coarse, fresh and thin soils under sal climate have poor growth of the species; and medium growth is registered in comparatively base richer soils. The soils are discussed to have been derived so by the process of 'laterisation' under the forest floor and the existing climate. Further, foliar analysis confirms the chemical status of the soils and reveals that sal is not a heavy demander of soil bases.
246. **Panigrahi, G. & Arora, C.M. 1965.** "Contribution to the botany of Madhya Pradesh-II (Families Rosaceae to Rubiaceae)". *Proc. Natl. Acad. Sci. India* 35: 87–98.
247. **Panigrahi, G. & Murti, S.K. 1989.** *Flora of Bilaspur district (Madhya Pradesh)*. Vol. 1 (Ranunculaceae to Convolvulaceae). Botanical Survey of India, Calcutta. Abstract: The flora deals with 852 species belonging to 507 genera and 120 families of flowering

- plants. Out of these, 248 species in 130 genera and 24 families belongs to monocotyledons and 604 species in 337 genera and 96 families belongs to dicotyledons.
248. **Panigrahi, G. & Prasad, R. 1966.** "Contribution to the botany of Madhya Pradesh-IV". *Proc. Natl. Acad. Sci. India* 36: 553–564.
  249. **Panigrahi, G. & Singh, A.N. 1967.** "Contribution to the botany of Madhya Pradesh-V". *Proc. Natl. Acad. Sci. India* 37: 77–104.
  250. **Panigrahi, G. & Verma, D.M. 1965.** "Contribution to the botany of Madhya Pradesh-III". *Proc. Natl. Acad. Sci. India* 35: 99–109.
  251. **Panigrahi, G., Arora, C.M., Verma, D.M. & Singh, V.N. 1966.** "Contribution to the botany of Madhya Pradesh-I (Dilleniaceae to Moringaceae)". *Bull. Bot. Surv. India* 8(2): 117–125. Abstract: The paper which represents the first part of a series of communication on the flowering plants from Madhya Pradesh presents an enumeration of 164 species belonging to the families Dilleniaceae to Moringaceae, following Bentham & Hooker's (1883) system. Notes on habitat, flowering and fruiting season, exact localities from where the species have been collected together with the field nos. of the collector, abundance in the area are appended to every species enumerated.
  252. **Paradkar, N.R. 1995.** "Weed flora of winter crops in Balaghat district (Madhya Pradesh)". *Advances Pl. Sci.* 8(II): 367–370. Abstract: Weed survey in winter crops of Balaghat district (Madhya Pradesh) revealed that irrigated wheat comprised of 33 weed species belonging to 29 genera and 15 families. Fabaceae, Poaceae and Asteraceae contributed about 50% weeds to the total weed flora. Dicot weeds exceeded monocots. *Cyanodon dactylon* (Linn.) Pers., *Chenopodium album* Linn., *Melilotus alba* Desr., *Gnaphalium polycaulon* (Linn.) Pers., *Anagallis arvensis* Linn., *Sisymbrium irio* Linn. and *Vicia angustifolia* Linn. were the dominant weeds of irrigated wheat. The major weeds of unirrigated wheat comprised of *Cyanodon dactylon* (Linn.) Pers., *Gnaphalium polycaulon* (Linn.) Pers., *Vicia angustifolia* Linn. and *Chenopodium album* Linn. Almost similar weeds were recorded in gram and linseed. Unirrigated areas infested with less than 50% weed species to the flora of irrigated wheat.
  253. **Paradkar, N.R., Tiwari, J.P., Kurchania, S.P. & Bhalla, C.S. 1994.** "Weeds of wheat and gram crops at Indore and Dhar Districts of Madhya Pradesh (India)". *World Weeds* 1(2): 113–116. Abstract: A survey of weed flora of wheat (*Triticum aestivum* L.) and gram (*Cicer arietinum* L.) was conducted during Rabi, 1989 in Indore and Dhar districts of Madhya Pradesh. Twenty eight weed species were found infesting the wheat crop. On the basis of IVI, the most dominant weeds among dicotyledonous were *Anagallis arvensis* (37.5), *Melilotus alba* (27.2), *Cichorium intybus* (24.4), *Chenopodium album* (22.4), *Brassica sinensis* (18.0), *Vicia sativa* (15.3), *Convolvulus arvensis* (13.0), *Launaea asplenifolia* (11.2) and *Euphorbia geniculata* (11.1). The predominant monocotyledonous weeds comprised of *Cynodon dactylon* (17.3), *Cyperus rotundus* (8.6) and *Avena fatua* (5.5). In



gram crop the common weeds were almost similar to those of wheat but total species infested were about 50 percent as compared to wheat. The dicotyledonous weeds having maximum IVI were *Euphorbia geniculata* (42.9), *Launaea aspleniifolia* (34.4), *Brassica sinensis* (28.6), *Cichorium intybus* (28.4), *Chenopodium album* (22.3) and *Melilotus alba* (21.5), while amongst monocotyledonous *Cynodon dactylon* (16.1), *Cyperus rotundus* (10.1) and *Avena fatua* (8.6) were dominant.

254. **Pateria, A.K. & Sahu, T.R. 1982.** "A note on potentially allergenic pollen producing plants of Central India". *Bull. Bot. Soc. Univ. Saugar* 29: 28–31. Abstract: In India millions of patients are suffering from allergenic rhinitis (hay fever) and bronchial asthma. Immunotherapy which is the most scientific way of treatment of such allergenic disorders can only be started if the offending allergen is known in each case. For this, one has to know the names of the most common air borne allergens i.e. pollen grains, fungal spores etc. of the geographical region in which the patients live. Plants can be considered significant in allergy if they are widely distributed and able to liberate large quantity of pollen grains (Thommen, 1931) therefore the present work was initiated to prepare a list of the most common plants whose pollens are produced in large number. In total 33 plants were recorded during the study.
255. **Pateria, A.K. & Sahu, T.R. 1983.** "Studies in pollen allergy in Sagar area. I. Pollination calendar". *J. Econ. Taxon. Bot.* 4(3): 897–901. Abstract: The present paper deals with the pollination calendar of the common species, which shed their large amount of pollens in the atmosphere of Sagar area. Besides this, the atmospheric pollen has also been studied by gravity slide method. This is pre-requisite for the study of local allergenic plants, as pollen grains form an important group of allergens.
256. **Pateria, A.K. & Sahu, T.R. 1994.** "Aerobiological studies at Sagar: Pollen calendar". *J. Econ. Taxon. Bot.* 18(1): 87–104. Abstract: A survey of atmospheric pollen was carried out for the year 1980 by exposing adhesive coated slides. A total number of 8931 pollen grains were collected, which were categorised into 105 type. Among these 35 belong to tree pollen, 17 to shrubs and remaining 53 to herbs. Tree pollen showed their abundance for a particular period whereas pollen grains of herbaceous plants like grasses, sedges and Amaranths were observed throughout the year. Three groups have been recognised, according to the period of occurrence of different pollen types in the atmosphere. i) The plant species whose pollen were found in the air almost throughout the year; ii) plant whose pollen were found in the atmosphere for more than one season and iii) plant species whose pollen production period was found to be very short.
257. **Pateria, A.K., Sahu, T.R. & Mishra, G.P. 1981.** "Aerobiological survey of Sagar: I. Winter Season". *Bull. Bot. Soc. Univ. Saugar* 28: 1–9. Abstract: The aerobiological survey of Sagar was carried out during the winter season. Gravity slide method was used for the collection of spores. The various biopollutants were trapped on the slides but pollen

and fungal spores were taken into consideration. Analysis of atmospheric survey of Sagar revealed that aerospora is qualitatively and quantitatively rich. November and January were the peak periods in which maximum number of spores were caught. These periods correspond to the flowering periods of plants and sporulation of fungi. The period of December and February showed the minimum frequency in both quality and quantity of the spores.

258. **Pateria, A.K., Sahu, T.R. & Mishra, G.P. 1981.** "Aeropalynological survey of Sagar: II. Summer Season". *Bull. Bot. Soc. Univ. Saugar* 28: 46–48. Abstract: The results of daily survey of atmospheric pollen grains in Sagar during summer season is presented in this communication. A total number of 4846 grain, belonging to 18 categories were trapped. Pollen grains of grasses, sedges and chenopod *Amaranthus* were found in all the studied months. Monthly variations in the quality and quantity of the pollen grains were also observed.
259. **Pateria, N. & Verma, A. 2010.** "Reassessment of family Ceasalpiniaceae in Safar district with special reference to ethnomedicinal importance". *Biozone* 2(1-2): 248–253.
260. **Pathak, K., Bajpai, S.P. & Athaya, C.D. 2007.** "Present status of natural regeneration in dry deciduous mixed forests of Naoradehi Wild Life Sanctuary". *J. Trop. Forest.* 23(3&4): 30–38. Abstract: This paper deals with the present status of natural regeneration of dry deciduous forest trees in Naoradehi sanctuary. A detailed account of the forest areas of Sagar, along with percentage distribution of area under dry deciduous forest of Naoradehi sanctuary, in Molali, Singhpur, Naoradehi, Sarra and Dongargown sites have been studied. A very high density of sapling and coppices growth of *Tectona grandis* and its associates indicate an extremely good regeneration at the initial stages. Natural regeneration and behaviour of tree species is characterized by their population structure with in the ecosystem.
261. **Pathak, K., Bajpai, S.P., Jain, P. & Parmar, S.P.S. 2012.** "Phenological study of some medicinal plant species in Sagar (M.P.)". *Life Sci. Bull.* 9(2): 409–411. Abstract: The phenological changes of plants in relation to various phases of their life cycle and seasons is governed by a number of a composite factors. Phenological studies of five medicinal plant species namely *Asparagus racemosus*, *Andrographis paniculata*, *Helicteres isora*, *Mucuna prurita* and *Gloriosa superba* have been undertaken. The timing of phenophases is clearly correlated with air temperature, soil temperature, photoperiod and soil moisture but it may vary from species to species. Man has often been attracted by the phenological changes taking place in his surrounding flora.
262. **Patil, A.K. & Kumar, V. 2015.** "Cost of living near forests: an economic analysis in Central India". *J. Trop. Forest.* 31(4): 1–11. Abstract: Financially, the forest fringe communities do not have to pay any royalty or tax or cess for enjoying most of the goods and services offorests in Madhya Pradesh - the central and most forested state of India

But, it does not mean that they do not pay any price at all. The present research tried to investigate and evaluate the economic costs that they are paying for living near forests in the form of losses caused by the wildlife- the carnivores and the herbivores alike- in Madhya Pradesh. Relevant data were collected from the division offices as well as from the village level structured socio-economic surveys in six forest divisions- one from each of the six eco-regions of the state. The analysis of these data has resulted in arriving at the losses (the costs of living near forests) per hectare of the forest area that the forest fringe communities are paying for the sake of living near the forests. A win-win strategy has been proposed for paying the compensations by using this methodology.

263. **Patole, S.N. & Jain, S.K. 2002.** "Some wild edible plants of Pachmarhi Biosphere Reserve (M.P.)". *Ethnobotany* 14: 48–51. Abstract: The paper deals with the study of 45 plant species consumed by the tribals and other rural people living in and around Pachmarhi Biosphere Reserve. Plant parts such as rhizomes, leaves, shoots, flowers, fruits and seeds are eaten in various ways. A few of the recorded species are already known for their edible value; however, the uses of many taxa are uncommon.
264. **Pawar, K., Prakash, M.M., Dubea, B. & Malhotra, M. 2007.** "Distribution and composition of macrophytes of Sirpur Tank, Indore (M.P.)". *Fl. & Fauna* 13(2): 329–332. Abstract: Sirpur tank is an important multipurpose lentic water body of Indore (M.P.). It harbours 21 aquatic macrophytes including 2 algae and 2 pteridophytic ferns. The percent composition of dicot, monocot and other groups were 46.15, 30.76 and 23.07 respectively. The *Hydrilla verticillata* was recorded as the most dominant aquatic species, while *Azolla pinnata*, *Ottelia alismoides*, *Vallisneria spiralis* and *Nymphoides cristatum* were the rare species. The present water body was also observed as a good wintering habitat for many water birds.
265. **Payak, M.M. 1998.** "Pandanus, Screw Pine painting in fifth century Buddhist Cave of Bagh, Madhya Pradesh, India". *Econ. Bot.* 52(4): 423–425.
266. **Porte, S.S. 1965.** "Dahi cultivation in Bindra Nawagarh tahsil of Raipur district". *Vanyajati* 13(3): 93–101.
267. **Pramanik, A. & Thothathri, K. 1988.** "Notes on taxonomy and distribution of two *Alysicarpi*". *J. Econ. Taxon. Bot.* 12(2): 363–364. Abstract: The systematic position of *Alysicarpus monilifer* var. *venosa* is changed and is placed in *A. vaginalis*. *Alysicarpus meeboldii* is treated as a variety of *A. heyneanus*. The former variety is earlier reported from W. Rajasthan, later collected from Tamil Nadu, Andhra Pradesh and West Bengal. Hence its range of distribution is extended to Tamil Nadu, Andhra Pradesh and West Bengal, all constituting new records of occurrence in the above states. The later variety is earlier reported from Jammu and Kashmir and Uttar Pradesh, and recently it has been collected from Madhya Pradesh. This collection constitutes a new distributional

record of the variety and thus extends its distribution to southwards. This plant is rare and endemic to India.

268. **Prasad, R. & Pandey, R.K. 1985.** "Methyl-Isocyanate (MIC) hazard to the vegetation of Bhopal". *J. Trop. Forest.* 1(1): 40–50. Abstract: On the night of 2/3 December 1984, leakage of lethal "Methyl Isocyanate" (MIC) gas from Union carbide factory, a pesticide manufacturing unit at Bhopal resulted in loss of thousands of human and animal lives and seriously affected many more living around this factory. This tragic industrial accident in Bhopal, not only took the toll of human and animal lives but it also left a severe and lasting impact on the vegetation growing in the nearby areas. In the present study, an attempt has been made to evaluate the impact of MIC gas on the vegetation of Bhopal. The whole area was visited and thoroughly surveyed to delineate the area into severely affected, partially affected, less affected and unaffected localities, depending upon the severity of the effect of gas on vegetation. For the purpose of this classification, the effect of gas, as exhibited by the extent of injury on leaves, flowers, fruits and entire plants of different species, was observed. Depending on the extent of external injury to various plant parts in the affected localities, the plants were grouped into four categories viz., severely affected plants (xxx), partially affected plants (xx), less affected plants (x) and unaffected plants (—). In all, about 50 plant species were closely examined for their endurance against MIC gas.
269. **Prasad, R. & Pandey, R.K. 1985.** "Natural plant succession in the rehabilitated Bauxite and Coal Mine overburdens of Madhya Pradesh". *J. Trop. Forest.* 1(4): 309–320. Abstract: Trial plantations of various tree monoculture were started on bauxite mine overburdens in 1979 and on coal mine overburdens in 1982. These sites were surveyed to ascertain the pace of natural succession under planted tree cover as well as on abandoned sites not covered by any tree plantations. During the survey of plant community under plantations raised in different years, a large number of plant species other than the planted ones have been observed coming up on both sites. In terms of total number of plants, coal mine overburdens appear to have provided more hospitable conditions for natural succession than bauxite mine overburdens. As against 14,580 plants/ha observed on revegetated bauxite mine overburdens (1982), only 24,936 plants/ha were found on rehabilitated coal mine dumps of the same year. In addition, natural regeneration of some planted tree species (*Eucalyptus* spp., *Acacia auriculiformis* and *Grevillea pteridifolia*) have also been observed. A few seedlings of species of the adjoining natural forests which existed before mining (*Shorea robusta*, *Kydia calycina*, *Pterocarpus marsupium*, *Butea monosperma*, *Syzygium cumini*) were also observed. The soil environment appears to have been modified by the addition of huge quantity of litter (leaves, flowers, barks, twigs etc.). The sites are gradually developing to provide more congenial growing environment leading to the ultimate creation of self-sustaining ecosystem. Distribution

pattern of various types of vegetation on bauxite and coal mine overburdens have been discussed in the paper.

270. **Prasad, R.&Shukla, P.K.1985.** "Reclamation and revegetation of coal mine over burdens in Madhya Pradesh". *J. Trop. Forest.* 1(1): 79–84. Abstract: In all 13 species have, so far, been tried in the coal mined areas of Western Coalfield Ltd. at Dhanpuri near Shahdol. Almost all the species tried on coal mine overburdens have been found successful. However, in terms of height growth (and now in terms of tree diameter), *Eucalyptus* species (*Eucalyptus* hybrid and *E. camaldulensis*) and *Acacia auriculiformis* have been exceptionally good. Maximum tree height of 6 m has been observed in *Eucalyptus* hybrid. Other species, especially *Dalbergiasissoo*, *A. nilotica*, *Pongamiapinnata* etc., were also found doing well with the average plant height of 3-4 meters. Bamboo (*Dendrocalamusstrictus*) was also interplanted with other species at a spacing of 4m x4m. It has also given very good results. There are, on an average 3 to 4 culms in each clump, having the height of 2-3 m. The exceptionally good performance of the trial plantations raised on coal mine over-burdens near Dhanpuri is clearly indicative of the scope of reclaiming and revegetating such waste lands in shortest possible time.
271. **Prasad, R.&Shukla, P.K. 1985.** "Restoration of Ecological Balance to the Bauxite mined areas of Madhya Pradesh". *J. Trop. Forest.*1(3): 236–245. Abstract: Bauxite is found on the plateaux of Mandla, Shabdol, Bilaspur, Raigarh and Surguja districts of Madhya Pradesh. These areas carry Sal (*Shorearobusta*) forests as natural vegetation. Buxite is extracted by open - cast mining. In this process, the original vegetation is cleared and the ground is excavated. The present paper describes the performance of various trial plantations raised by the State Forest Research Institute, Jabalpur from 1979 and onwards, on bauxite mined areas exploited by BALCO near Amarkantak in Mandla district of Madhya Pradesh.Eight exotic and two indigenous species were tried in 1979. Among these, 2 species, viz., *Melaleucaleucodendron* and *Moringa* spp., completely failed. Other 8 species responded quite well but the performance of *Eucalyptuscamaldulensis* and *Grevilleapteridifolia* was found superb with 7.76 m and 5.01 m mean heightat the age of about 5 years. Other suitable species are *Pinuscaribaea*, *Grevillearobusta* and *Acacia auriculiformis* with average heights as 2.34 m, 2.50 m and 2.11 m respectively.The present paper describes the afforestation technique for such a refractory site and discusses the relative performance of various species in terms of organic productivity.
272. **Prasad, R., Kotwal, P.C. & Mishra, M. 2002.** "Harvesting practices of Safed musli (*Chlorophytum* spp.) and its ecological impact on the natural forests of central India". *J. Trop. Forest.* 18(1): 9–24.
273. **Rajak, R.C., Rai, M.K. & Panday, A.K. 1985.** "New host records of *Cuscuta reflexa*". *J. Trop. Forest.* 1(2): 166–167. Abstract: The present paper records, *Cuscuta reflexa* parasitizing on eight new hosts, viz., *Hamelia patens*, *Thevetia peruviana*, *Clerodenron*

*inerme*, *Lantana camera*, *Aegle marmelos*, *Duranta repens*, *Lagerstreamia parviflora* and *Plumeria rubra* around Jabalpur, Madhya Pradesh. All these plants have medicinal or ornamental values.

274. **Ray, S. 2008.** "Analysis of the phytogeographical elements of Dewas district (Malwa Region) M.P.". *J. Bot. Soc. Univ. Sagar* 43: 47–51. Abstract: Present Paper deals with phytogeotgraphical elements of Dewas district (Malwa Region). In this communication 874 wild and naturalized plants have been analyzed. Phytogeographical analysis of the flora shows the area as a meting ground for diverse floristic elements.
275. **Ray, S. & Sainkhediya, J. 2016.** "Wild relatives of cultivated plants in Nimar region, Madhya Pradesh, India". *Phytotaxonomy* 16: 94–98. Abstract: The Nimar region is situated in southern western part of Madhya Pradesh covering four districts namely West Nimar (Khargaon), Barwani, East Nimar (Khandwa) and Burhanpur, northern part of Nimar region is covered with Vindhyan scabs and southern part with Satpura hill ranges. Present study reveals 41 species of wild relatives of crops and other cultivated plants. These 41 plant species are distributed in 29 genera and 10 families.
276. **Reshi, M.I., Chadhar, B.L. & Khare, P.K. 2017.** "Alien invasive plants of central Indian tropical dry deciduous forests of Sagar district, Madhya Pradesh, India". *Indian Forester* 143(2): 157–164. Abstract: Database of alien invasive plants are not only fundamental in understanding the causes and impacts of invasion phenomenon but are also desirable because of their relevance to conservation of natural biodiversity. The present paper deals with an up to date inventory of alien invasive plant species in the tropical dry deciduous forests of Sagar, Madhya Pradesh, India. A number of species that have already introduced in this area have been documented. Alien flora consisted of 143 alien species belonging to 97 genera comprising of 42 families, with Asteraceae the largest family. The list of plant species is prepared giving their family name, nativity, habit and probable mode and year of introduction. Majority of the 143 species documented were herbaceous followed by shrubs and trees. 67% of the species are annuals followed by perennials. The alien flora has contributions from 12 geographical regions of which tropical America contributes to 50%. Most of the species have been found to have introduced unintentionally. The present checklist will provide the basic database to understand the plant invasion pattern in the region.
277. **Roy, G.P. & Shukla, B.K. 1983.** "A contribution to the grass flora of Madhya Pradesh-I". *J. Econ. Taxon. Bot.* 4(2): 567–573. Abstract: Grasses of Madhya Pradesh have been studies by several workers beginning from Hooker (1896), Tiwari (1954, 1955, 1963), Bor (1960), Joseph (1963), Maheshwari (1963), Shukla & Panigrahi (1967), Saxena (1970-1971), Oommachan (1977). After critical study of herbarium specimens deposited at BSA, CAL and LWG and perusal of literature, it has been revealed that much work needs to be done. In the present paper, an attempt has been made to show the

- phytogeographical regions and distribution of 322 species of 107 genera belonging to family Poaceae in Madhya Pradesh.
278. **Roy, G.P., Datt, B. & Shukla, B.K. 1985.** "A taxonomic study of the family Polygalaceae in Madhya Pradesh". *J. Econ. Taxon. Bot.* 6: 671–678. Abstract: The present study is an account of 13 species of family Polygalaceae found in Madhya Pradesh, based on field observation and critical studies of the specimens represented in various herbaria.
279. **Rao, A.S. & Sastry, A.R. 1964.** "An account of the flowering plants of Indore district in Madhya Pradesh". *Bull. Bot. Surv. India* 6(2-4): 267–286. Abstract: This account of the flowering plants of Indore district is based on the observations made during 1961, 1962 and 1963. The enumeration includes 556 species 373 genera and 94 families of the flowering plants. The nomenclature has been revised to conform to modern taxonomic usage in accordance with the Montreal Code.
280. **Rao, R.S. & Narayanaswamy, V. 1960.** "Contribution to our knowledge of the vegetation and flora of Pachmarhi plateau and adjacent regions". *J. Indian Bot. Soc.* 39: 227–242. Abstract: In the present paper 393 species under 273 genera belonging to 89 families of angiosperms and 20 species under 18 genera within 10 families of pteridophytes has been enumerated from the Pachmarhi plateau and adjacent regions.
281. **Ray, S. & Sainkhediya, J. 2012.** "Diversity of grasses in Nimar region, Madhya Pradesh". *Indian J. Pl. Sci.* 1(2-3): 144–152.
282. **Ray, S. & Solanki, C.M. 1998.** "Studies on the vegetation and statistical analysis of Dewas district (M.P.)". *J. Econ. Taxon. Bot.* 22(2): 397–404. Abstract: Present paper deals with the vegetation and statistical analysis of 874 flowering plants distributed over 121 families and 505 genera collected from the study area. This gives a clear picture of the floristic composition of the district. Intensive and extensive surveys have been carried out during 1989-1994.
283. **Roy, D. 2016.** "Eco-taxonomic studies of family Asteraceae (Compositae) in Raipur district of Chhattisgarh, India". *Indian J. Appl. Pure Biol.* 31(1): 7–18. Abstract: Taxonomic investigation of the family Asteraceae (Compositae) growing throughout the Raipur was carried out. A total of about 57 species under 43 genera of the family Asteraceae were collected and identified. A brief taxonomic description of some common species is given in this paper.
284. **Roy, D. & Kanungo, V.K. 2016.** "Common weeds of family Asteraceae (Compositae) in Raipur district of Chhattisgarh, India". *Indian J. Appl. Pure Biol.* 31(2): 165–168. Abstract: During 2013-15, five sites of Raipur were botanically explored to assess the status of family Asteraceae in the said District. It was revealed that 16 species belonging to 16 genera are moderately to abundantly found. They occupy different ecological habitats, their occurrence at the five selected sites has been depicted in table-1.

285. **Roy, D. & Kishore, K. 2011.** "An eco-taxonomic study of the genus *Ludwigia* L. (Family-Onagraceae) of Chhattisgarh, India". *Indian J. Appl. Pure Biol.* 26(2): 263–267. Abstract: Present paper provides a eco-taxonomic account of Genus *Ludwigia* L. of family Onagraceae, which is represented by 5 species in Chhattisgarh. Their nomenclature, description, phenological data, distribution and uses etc. are given along with key to the species. Study is based on the herbarium specimens deposited in Botanical survey of India (BSA) Allahabad.
286. **Roy, G.P. 1984.** *Grasses of Madhya Pradesh*. Botanical Survey of India, Howrah. Abstract: The present book deals with 257 species of grass belonging to 101 genera.
287. **Roy, G.P. & Shukla, B.K. 1983.** "A contribution to the grass flora of Madhya Pradesh-I". *J. Econ. Taxon. Bot.* 4(2): 567–573. Abstract: Grasses of Madhya Pradesh have been studied by several workers beginning from Hooker (1896), Tiwari (1954, 1955, 1963), Bor (1960), Joseph (1963), Maheshwari (1963), Shukla & Panigrahi (1967), Saxena (1970-1971), Oommachan (1977). After careful study of herbarium specimens deposited in BSA, CAL & LWG and perusal of literature, it has ben revealed that much work needs to be done. In the present paper, at attempt has been made to show the phytogeographical regions and distribution of 322 species of 107 genera belongs to family Poaceae in Madhya Pradesh.
288. **Roy, G.P. & Shukla, B.K. 1983.** "A contribution to the grass flora of Madhya Pradesh-I". *J. Econ. Taxon. Bot.* 4(2): 587–589. Abstract: In the present paper five species, *Eragrostis pappiana* Chiov., *E. Riparia* (Willd.) Nees, *E. Aspera* (Jacq.) Nees, *Bambusa vulgaris* Schrad. ex Wendel. and *Salvia coccinea* Juss. ex Murr. Have been recorded for the first time from Madhya Pradesh. Their brief description and distribution are also given.
289. **Roy, G.P. & Shukla, B.K. 1989.** "Development and vegetation in Singrauli Coal Mines Area-I. Plants of overburden". *Res. J. Environm.* 5(2): 79–81.
290. **Roy, G.P., Shukla, B.K. & Dutt, B. 1992.** *Flora of Madhya Pradesh (Chhatarpur and Damoh)*. Ashish Publishing House, New Delhi.
291. **Sagreiya, K.P. 1938.** "List of common forest plants of the Central Provinces and Berar". *Forest Bull.* 1: 1–20.
292. **Sahu, K.P., Urmalia, R., Mashi, S.K. & Tiwari, V. 2012.** "Contributions to the flora of Umaria district of Madhya Pradesh". *J. Econ. Taxon. Bot.* 36(2): 261–274. Abstract: An investigation was conducted to know the floral diversity in Umaria district of Madhya Pradesh. Extensive and intensive field surveys were undertaken during the year 2009-2011. On the basis of survey, a total of 351 plant species belonging to 276 genera and 100 families are enumerated. Out of which, Fungi group is represented only 1 species, Bryophytes (3), Pteridophyte (5), Angiosperm (340) and Gymnosperm (2). Whereas, 115 species belong to trees, 61 species to shrubs, 81 herbs, 37 climbers, 3 parasites, 53 grasses and 1 epiphyte.



293. **Sahu, T.R. 1982.** "Weed flora of wheat crop in Madhya Pradesh". *Indian J. Weed Sci.* 13(2): 154–155.
294. **Sahu, T.R. 1984.** "Studies on the wall flora of man made habitats of Sagar". *Indian J. Forest.* 7(3): 232–238. Abstract: A preliminary survey of wall flora of Sagar and suburbs was carried out. The constituents of wall flora of this city include 85 angiospermic plants belonging to 73 genera and 30 families. The vegetation of the man made habitats shows sharp differences in different seasons. During rainy season a large number of plant species are found and all show luxuriant growth due to sufficient water supply and high percentage of relative humidity in the atmosphere. In summer the vegetation becomes extremely this and only some perennials remain in an aphyllous condition.
295. **Sahu, T.R. 1984.** "Systematic account on the vegetation of special habitats of Sagar". *J. Econ. Taxon. Bot.* 5: 409–414. Abstract: Vegetation of special habitats of Sagar are described into two categories- first deals with the flora of grazed grasslands, grassy lawns, moist grassy area, shady moist area, irrigation canals and nullahs, low lying land, damp drying ditches and ponds, clayed beds with deep fissures, rocky bed of river banks, rocky slopes, old walls and waste places, and the second includes the systematic account of the cultivated plants like roadsides avenue trees, garden avenue trees, cultivated climbers, ornamental seasonal herbs, hedge plants and agricultural crops.
296. **Sahu, T.R. & Mishra, D.P. 1982.** "A contribution to the weed flora of special habitats of Sagar (M.P.) India". *Bull. Bot. Soc. Univ. Saugar* 29: 71–76. Abstract: The flora of Sagar is composed of many alien weeds and some of them now accepted as natural constituents of the vegetation, are mixed, grow and reproduce freely and with the result the natural vegetation has been masked. The present paper deals with the distribution and association of these weeds in different habitats. A brief account of some recently introduced weeds has also been given.
297. **Sahu, T.R. & Mishra, G.P. 1978–1979.** "A contribution to the study of Asteraceae of Sagar and the adjacent regions". *Bull. Bot. Soc. Univ. Saugar* 25&26: 67–72. Abstract: A total of 66 species belonging to 47 genera of Asteraceae of Sagar and adjoining regions are recorded under their respective tribes. The prominent are Inuloideae and Helianthoideae with 18 species in each. The flowering period, distribution and relative abundance of all the species collected from six different localities of Sagar area, are also recorded.
298. **Sahu, T.R. & Sahu, P. 2004.** Biodiversity: Its different aspects and conservational strategies. In: Dagar, J.S. & Sharma, T.A. (Eds.), *Plant Diversity in India*. Bishen Singh Mahendra Pal Singh, Dehra Dun. Pp. 1–24.
299. **Sahu, Y., Meshram, N., Thakur, G.S. & Shrivastava, R. 2011.** "Ecological status of medicinal plant of Durg Nagar Nigam area, Chhattisgarh". *Advances Pl. Sci.* 24(II): 621–632. Abstract: The present paper analysis native medicinal plants and their

ecological status of the plant species of Nagar Nigam Area, District Durg has been abstracted synthetically. During this study one hundred fifty two species of medicinal plants belonging to sixty six families are described out of which one hundred fifty medicinal plant species belonging to sixty four different angiospermic families and two gymnosperms were found in the study area.

300. **Saigal, D.D. 1954.** "Forests of Vidhya Pradesh". *Indian Forester* 80(12): 861–865. Abstract: The forest of Vindhya Pradesh are rich in all varieties of forest produce and are a big asset to the state. They provide 33% of the gross revenue. Most of the present revenue is from minor forest products. They are, however, capable of great development. A start has been made in the first five-year plan. Most of the development is expected in the second-five year plan when it is hoped to bring all areas under systematic management. Development of forest industries is an item of great importance. The forests also abound in wild game which provides a great attraction to the sportsmen.
301. **Sainkhediya, Jeetendra & Ray, S. 2012.** "Preliminary study of flowering plant diversity of Nimar region". *Biosci. Discov.* 3(1): 70–72.
302. **Sainkhediya, Jeetendra & Ray, S. 2014.** "Analysis of vegetation and floral diversity of Nimar region, Madhya Pradesh, India". *Indian J. Pl. Sci.* 4(3): 102-109. Abstract: The Nimar region is situated in southern western part of Madhya Pradesh and covering four districts namely West Nimar (Khargone), Barwani, East Nimar (Khandwa) and Burhanpur. Northern part of Nimar region is covered with Vindhyan scabs and Southern part with Satpura hill ranges. Present study records a total of 1039 plants species which are distributed in 595 genera and 124 families. Different life forms diversity is Herbs (704), Shrubs (122), Trees (139), and Climbers (74) and represented 67% of herbaceous elements of total flora. Therophytic vegetation is dominant.
303. **Saket, S.P. & Saini, Vimal K. 2016.** "A comprehensive floristic study of Jabalpur district with special emphasis to dominant family". *Int. J. Sci. & Res.* 5(11): 90–92. Abstract: Jabalpur is one of the districts in Madhya Pradesh as known "heart of the state" with highly rich floristic biodiversity of plants. Jabalpur is also known as the "City of Ponds". Due to recent drastic changes after urbanization and industrialization have affected the flora of Jabalpur district. In review of it after studied it is necessary to update and revise the flora of Jabalpur. It has some hilly tracks covered with luxuriant vegetation along with the forest area is represented by mixed deciduous forest. Taxonomical investigation were undertaken to explore the floristic status of the ten dominant families. The updated data based on DELTA (description language for taxonomy) software with new advancement.
304. **Saket, S.P. & Saini, Vimal K. 2016.** "Taxonomical and floristic study of ground flora in urban area of Jabalpur and its surroundings Madhya Pradesh India". *Int. J. Global Sci. & Res.* 3(6): 430–438.

305. **Saket, S.P. & Saini, Vimal K. 2017.** "Some noteworthy updates to the flora of Jabalpur district Madhya Pradesh". *Int. J. Bot. Stud.* 2(4): 84–87. Abstract: Jabalpur is one of the districts in Madhya Pradesh as known "heart of the state" with luxurious and rich floristic biodiversity. But, now a day's drastic changes in environmental conditions, biotic factors, and destruction and loss of habitat, urbanization and industrialization have affected the flora of Jabalpur a lot. After studied "The flora of Jabalpur" and some other researchers updates in existing flora. Thenceforward, in view of it and present study was done based on new digital technology, it is very necessary to update and revise the existing floristic structure of Jabalpur. Digital database preparation is technologically a step ahead in the revision of the flora with new advancement (2011-2015). The present paper enumerates additional some noteworthy dicot taxa collected from Jabalpur district which has under four genera and four different families which are new updates for the district of Jabalpur. The plants name viz. *Annona muricata* L. (Annonaceae), *Leucaena leucocephala* Lam. (Mimosaceae), *Spathodea campanulata* P. Beauv. (Bignoniaceae), *Ficus elastica* Bailey (Moraceae).
306. **Saksena, S.B. & Adoni, A.D. 1973.** "Diurnal variation in Sagar Lake, Sagar (India) II—Studies of some physico-chemical properties in shallow area". *Bull. Bot. Soc. Univ. Saugar* 20(1&2): 21–24. Abstract: Surface water temperature showed direct relation with the percentage saturation of oxygen. All samples except those of early morning hours were unusually supersaturated with oxygen and free carbon-dioxide was absent in all collections. Total carbonates were present in high concentration and showed an inverse relation with bicarbonates. Range of pH and chlorides was small. Organic effluence in the lake was low.
307. **Samvatsar, S. 1990.** *The floristic and biological spectrum of Jhabua district (M.P.) with notes on ethnobotany.* Devi Ahilya University, Indore (unpublished).
308. **Samvatsar, S. 1996.** *The Flora of Western Tribal Madhya Pradesh.* Scientific Publishers, Jodhpur.
309. **Samvatsar, S. & Diwanji, V.B. 1992.** "Vegetation of Jhabua distt. (M.P.)". *Van Vigyan* 30(3&4): 151–160.
310. **Samvatsar, S. & Diwanji, V.B. 1993.** "Statistical analysis of the flora of Jhabua distt. (M.P.)". *Indian Bot. Repert.* 12(1&2): 26–36.
311. **Samvatsar, S. & Diwanji, V.B. 2004.** "Noteworthy plants coming under submergence due to Sardar Sarovar Project within Madhya Pradesh". *J. Econ. Taxon. Bot.* 28(1): 167–174. Abstract: Sardar Sarovar Project at Navagam, district Bharuch, Gujarat is going to submerge 1215 sq. kms. of land within 3 districts of M.P. It would effect nearly 1,00,000 people inhabiting 193 villages, 899 wild and naturalised elements belonging to 479 genera within 113 families would also be submerged. 185 species are singled out as rare and noteworthy.

312. **Sanghi, S.B. 2015.** "Diversity of tree flora of Tendukheda, district Narsinghpur, Madhya Pradesh". *Int. J. Pharm. Life Sci.* 6(6): 4562–4564. Abstract: A preliminary survey of Tendukheda tehsil was carried out to get the information about its tree flora in the year 2013-14. The Survey revealed that 37 angiospermic plant species are present there which are growing as naturally occurring species or cultivated trees in the town area.
313. **Sanghi, S.B., Sharma, Chanchal & Sanghi, Sunil Kumar. 2015.** "Comparison of APTI values of some medicinal plants of Industrial areas and Ratapani Wildlife Sanctuary in Raisen district of Madhya Pradesh". *Int. J. Pharm. Life Sci.* 6(1): 4157–4160. Abstract: Today's growing population and increasing urbanization has resulted in a sudden increase in air pollution. Because of the detrimental effects of air pollution on humans, animals and plants, the ever increasing air pollution is causing concerns all over the world. Plants seem to be more sensitive to air pollution than animals including man. Various types of plants, being stationary and outdoor, are constantly exposed to air pollutants in the environment, where these plants absorb, integrate and accumulate pollutants on their foliar surface that leads to loss of vegetation and long lasting irreversible changes in ecosystem. The response of different plant species to these pollutants varies considerably. Some of the plants act as sinks for the abatement of air pollution in urban and industrial habitats. Since different plant species vary considerably in their susceptibility to air pollutants, it becomes important to screen plants for their sensitivity/tolerance levels. The present study is therefore based upon the evaluation of the susceptibility level of plants to air pollutants. Four parameters, viz. ascorbic acid (A.A), total chlorophyll (TCh), relative water content (RWC) and leaf extract pH were determined and combined together in a formulation signifying the Air Pollution Tolerance Index (APTI) of plants. APTI values of 7 plant species growing in industrial areas and Ratapani Wildlife Sanctuary were calculated. The APTI values of plants (*Abrus precatorius* L., *Gloriosa superba* L., *Tinospora cordifolia* Hook.) were higher than evergreen plants (*Achyranthes aspera* L., *Acorus calamus* L., *Andrographis paniculata* L., *Phyllanthus niruri* L.), suggesting that plants have more capability to tolerate the high pollution level. Also the same plant species growing in different areas showed variations in APTI values. In general, the plants growing in industrial areas had higher APTI values followed by the areas of Ratanpani Wild life Sanctuary. This indicates that exposure to pollutant gases induces increase in the parameter values responsible for higher APTI.
314. **Sankaran, Unni K. 1967.** "Studies on the vegetation of ponds, swamps and river banks in Raipur, Madhya Pradesh". *J. Bombay Nat. Hist. Soc.* 64: 95–102.
315. **Sankaran, Unni K. 1967.** "Compositae of Raipur and its surroundings (M.P.)". *J. Bombay Nat. Hist. Soc.* 64: 333–338.
316. **Saxena, H.O. 1970.** "The flora of Amarkantak (Madhya Pradesh)". *Bull. Bot. Surv. India* 12(1-4): 37–66. Abstract: The paper deals with the flora of Phanerogamous and

Pteridophyte of Amarkantak plateau. Total number of species enumerated in this paper is 635 (Angiosperms 612, Gymnosperms 2 and Pteridophytes 21) of which 7 species are new for Central India and 14 for Madhya Pradesh.

317. **Saxena, H.O. 1971.** "A contribution to the flora of Panchmarhi (Madhya Pradesh)". *Bull. Bot. Surv. India* 13(1-2): 79–93. Abstract: Panchmarhi, a popular hill station of Madhya Pradesh, having in it the highest hill top (Dhupgarh) of central India, presents very interesting features in its flora. It has received attention by several botanists due to its popularity and importance from floristic point of view and a number of contributions to the flora were made by them (Gamble 1892, Graham 1941-15, Pandey&Srivastava 1952, Rao&Narayanaswamy 1960, Kapoor&Yadav 1962 and others). The present paper records 304 species of flowering plants and ferns, which are reported for the first time from Panchmarhi. Sixteen species are new records for Madhya Pradesh (marked by single asterisk) and twelve for central India (marked by double asterisk). The species, of which previous record was found to be based on wrong identifications have been excluded from the flora, namely *Fimbristylis podocarpa* Nees & Meyen, *Arthraxon serrulatus* Hochst., *Arundinella nepalensis* Trin., *Eragrostis nutans* (Retz.) Nees ex Steud., *Sporobolus elongatus* R. Br. and *Tripogon pauperculus* Stapf.
318. **Saxena, H.O. 1972.** "A contribution to the flora of Madhya Pradesh— I (New record of plants for Central India)". *Indian Forester* 98: 363–365. Abstract: The paper reports sixteen new records of plants for Central India from different regions of Madhya Pradesh.
319. **Saxena, H.O. 1973.** "Further contribution to the flora of Bailadilla (M.P.)". *J. Bombay Nat. Hist. Soc.* 70: 586–590.
320. **Saxena, H.O. 1973.** "Contribution to the flora of Madhya Pradesh- II (interesting records of Cyperaceae)". *Indian Forester* 99(8): 505–507. Abstract: The paper records seven additional species to the Cyperaceae of Madhya Pradesh, four of which are reported for the first time from central India. *Cyperus diaphanous* Schrad ex R. S. var. *gracilescens* (Kukenth.) Saxena, is a new combination formed.
321. **Saxena, H.O. & Khotela, S.N. 1976.** "A contribution to the flora of Bastar (M.P.)". *J. Bombay Nat. Hist. Soc.* 73: 21–34.
322. **Saxena, H.O. & Shukla, S.G. 1970.** "On a collection of plants from Patalkot (M.P.)". *Bull. Bot. Surv. India* 12(1-4): 188–202. Abstract: The present communication records 419 species of vascular plants from Patalkot valley in East Chhindwara Forest Division of Madhya Pradesh. Four species, viz., *Gnetum ula* Brongn., *Epipactis veratrifolia* Boiss. & Hohen., *Aleuritopteris rufa* (D. Don) Ching and *Senecio edgeworthii* Hook.f. are new record for central India. Occurrence of few species of south and south-east India, also of coastal regions, namely *Senecio edgeworthii* Hook.f., *Crotalaria nana* Burm.f., *Epithema carnosum* Benth. and *Gnetum ula* Brongn. and of Himalayan species *Epipactis veratrifolia* Boiss. & Hohen. and *Aleuritopteris rufa* (D. Don) Ching, is very interesting.

323. **Sebastine, K.M. & Balakrishnan, N.P. 1963.** "A contribution to the flora of North Eastern Madhya Pradesh". *Indian Forester* 89: 487–491, 522–539, 612–621. Abstract: The article deals with the flora of the North Eastern Regions of Madhya Pradesh. Botanical explorations were made at various places during the different seasons of the year and in all a total of 79 families represented by 279 genera and 382 species of flowering plants and 7 families represented by 11 genera and 15 species of non-flowering plants are found occurring in this region and they are enumerated.
324. **Seerwani, A.B. 1962.** "A study in the hydrophytes and plants of low-lying habitats in Jabalpur". *Bull. Bot. Surv. India* 4(1-4): 227–231. Abstract: The paper describes hydrophytic and lowlying vegetation of Jabalpur. Geographical and Geological conditions of Jabalpur have been described. Various habitats have been shown in the map. A table indicating the distribution of various hydrophytes in various habitats has been given. Seasonal changes in the hydrophytic vegetation have been described. Restricted occurrence of *Alisma reniforme*, *Blyxa roxburghii* and *Butomopsis lanceolata* has been observed. *Tamarix ericoides* has been found to grow luxuriantly in the sandy beds in the river Narmada. About 88 species of hydrophytes and lowlying plants spread over 6 families of pteridophytes, 13 families of monocots and 22 families of dicots have been recorded.
325. **Seerwani, A.B. 1973.** "A Study in the hydrophytes and plants of low lying habitats in Khargone and suburbs". *Bull. Bot. Soc. Univ. Saugar* 20(1 & 2): 43–47. Abstract: The paper describes hydrophytic and low lying vegetation of Khargone. Geographical conditions of Khargone have been described. Various habitats studied have been shown in the map. A table indicating the distribution of various hydrophytes in various habitats has been given. Hydrophytes like *Marsilea quadrifolia* Linn. and *Potamogeton aquaticus* Forssk. have been reported growing luxuriantly in the running water. Several algal members have also been reported out of which the occurrence of *Enteromorpha* sp. requires special mention, as it has not been much reported from India specially in the fresh water.
326. **Sen, S.K. & Karkun, D. 2012.** "Phyto-sociological studies of Urla pond in Durg city". *Life Sci. Bull.* 9(2): 413–416. Abstract: Majority of the ponds of Durg-Bhilai city are biotically disturbed shallow and perennial fresh water bodies. These are rich in plant diversity showing luxuriant growth of macrophytes. Certain macrophytes in the ponds are found useful to man and domestic animals. Since macrophytes are the major contributors of pond productivity, the present investigation have been focused on the same.
327. **Sen, S.K. & Karkun, D. 2013.** "Aquatic macrophytic diversity in lentic bodies of Drug-Bhilai city in Chhattisgarh (India)". *Advances Pl. Sci.* 26(1): 157–161. Abstract: Aquatic macrophytic vegetation and physico-chemical analysis were investigated in Urla, Deopal

Naga, Talpuri and Maitri Bagh ponds of Durg-Bhilai city. Total 13 species were recorded in different seasons and throughout the year. Maximum plant species diversity were recorded in winter while a little less diversity was found in summer and rainy seasons. Luxuriant growth of *Alternanthera philoxeroides* marked the higher  $\text{NO}_3^-$  content of water and physico-chemical analysis studies in Urla pond revealed that there was a drastic change in  $\text{Cl}^-$  concentration in the water with seasonal changes. It was highest during summer- 346.99 mg/l while the concentration depleted upto approximately 66% during winter and rainy seasons when the concentration recorded were 113.12 and 131.12 mg/l respectively. Similarly substantial variation in total alkalinity was also recorded. Total alkalinity was found to be 322.00 mg/l during summer while it got reduced upto 33% during winter and rainy season with the total alkalinity values of 242.25 and 270.00 mg/l. No significant variations were found in respect to other factors  $\text{NO}_3^-$ ,  $\text{PO}_4^-$  etc. growth of *Alternanthera philoxeroides* correspond to the  $\text{NO}_3^-$  content of pond water. With the gradual increase of  $\text{NO}_3^-$  content overall growth of this species also increase gradually. Therefore this species may be considered a good indicator of  $\text{NO}_3^-$  level of the water.

328. **Sen Gupta, G. 1977.** "A resume of botanical explorations and floristic studies in the central India state of Madhya Pradesh". *Bull. Bot. Surv. India* 19(1-4): 71–88. Abstract: Botanical explorations and floristic studies in Madhya Pradesh have been discussed of different period. A table regarding chronological sequence of plant explorations in Madhya Pradesh (including the herbaria where collection are deposited and references to related floristic publication has also been given. paper.
329. **Sen Gupta, G. & Lal, Ram 1973.** "Flora of Sidhi district, Madhya Pradesh - I". *Bull. Bot. Surv. India* 15(3): 182–188. Abstract: Flora of Sidhi district, Madhya Pradesh based on the collections made during the 5 exploration tours conducted between 1962 and 1971 is presented. A short account of the vegetation and its floristic composition along with other essential features of topography, climate, geology and soil are given in this paper. Systematic enumeration of about 680 species belonging to 417 genera under 103 families with keys to the taxa, reference citation, description and critical notes will be published in part II, which is under preparation. 8 species have been recorded for the first time from Madhya Pradesh.
330. **Seth, V.K. 1972.** "An appraisal of the forest potential of Bastar for Industrial Development". *Indian Forester* 98: 471–476. Abstract: The forests of Bastar district in Madhya Pradesh are very much in the news. The rich, untapped resources of the region await stepped-up development. The paper sent out to assess the forest resources of Bastar and to formulate an action programme for an integrated development of these resources, and forest-based industries. The principles on which the forests could be worked have also been touched upon briefly. The region holds a promise of yielding high

dividends on investments and, apart from providing gainful employment to the rural populace, it can help substantially in meeting the spiralling needs of the country of wood and wood-products.

331. **Shaikh, M. 2012.** "Studies on the flora of East Nimar region, Madhya Pradesh". *Life Sci. Bull.* 9(1): 187–190. Abstract: East Nimar region comprises of two districts namely Khandwa and Burhanpur. It is situated between 21°5'-22°25' North latitude and 75°57'-77°13' East longitude. The rocks are of Bijaver and Lameta formations. The vegetation is broadly divided into forest, grassland and hydrophytic categories. Under climax forest vegetation, two broad types were recognized i.e., teak forest and mixed forest. Its flora was poorly documented. Therefore floristic surveys were carried out between 2006–2010. Which resulted in record of total of 1110 angiosperm taxa. They fall under 593 genera and 130 families, bringing out of the genus species ratio as 1:1.87. The ten dominant families were Poaceae (162 taxa), Fabaceae (102), Cyperaceae (59), Asteraceae (53), Acanthaceae (43), Euphorbiaceae (40), Convolvulaceae & Lamiaceae (27 taxa each), Malvaceae (26), Scrophulariaceae (25) and Rubiaceae (22). The lifeforms were herbaceous with (62.78%), trees (15.94%), climbers (12.34%) and shrubs species (7.38%).
332. **Shaikh, M. & Tiwari, Arjun Prasad. 2017.** "A conspectus of Grasses: East Nimar, Madhya Pradesh, India". *J. Non-Timber Forest Prod.* 24(4): 195–208. Abstract: The present study was undertaken from December 2009 to September 2015 to explore the grasses of East Nimar, Madhya Pradesh. A total of 245 species belonging to 94 genera was recorded from the area. *Eragrostis* was the dominant genus with 17 species, followed by *Panicum* (9 spp.), *Aristida*, *Arthraxon*, *Ischaemum* and *Sporobolus* (8 spp. each), *Brachiaria* and *Digitaria* (7 spp. each), *Dichanthium*, *Pennisetum* and *Sorghum* (6 spp. each). The current nomenclature with flowering and fruiting periods, locality and importance of grasses have been provided.
333. **Sharma, A., Upadhyaya, S.D. & Agrawal, R. 2010.** "Assessment of socio economic and adoption behaviour of farmers practicing agroforestry in Jabalpur district of Central India". *J. Trop. Forest.* 26(3): 72–80. Abstract: The present paper assesses the socio economic behaviour of farmers adopting agroforestry practices outside forest area of Jabalpur district. An exploratory survey was conducted in the seven blocks of Jabalpur district with respect to land category of farmers and to know the distribution and adoption of agroforestry at farmer's field. The farmers were selected purposively from all the blocks. Results indicate that maximum number of farmers (44 per cent) has medium socio economic status followed by 37.1 per cent high socio economic status and 18.9 per cent have low socio economic status. Majority of the farmers (48.6 per cent) had low adoption score of agroforestry practices followed by medium (33.1 per cent) and then high (18.3 per cent) adoption score in Jabalpur district.



334. **Sharma, B.D. & Mamgain, R.M. 1983.** "Angiospermic flora of district Satna (M.P)". *J. Econ. Taxon. Bot.* 4: 1–79. Abstract: The present paper deals with the preliminary account of the angiospermic flora of district Satna (M.P.). The flora of district Satna is mixed-deciduous type. However, the floristic composition varies from place to place. In all four exploration tours were undertaken which resulted in collection of 392 species comprising of 260 genera and 73 families. Of the families Poaceae, Compositae, Papilionaceae, Cyperaceae, Acanthaceae, Euphorbiaceae, Amaranthaceae, Convolvulaceae, Labiatae and Rubiaceae, are in order of dominance. Workable keys to the genera and species are also provided to facilitate their identification.
335. **Sharma, R.S. 1968.** "A contribution to the Bombacaceae of Madhya Pradesh". *Bull. Bot. Soc. Univ. Saugar* 15(1 & 2): 7–9. Abstract: This article deals with the following genera: *Bombax* or *Salmalia*, *Chorisia*, *Adanosonia* and *Ceiba* or *Eriodendron* growing in Madhya Pradesh, with notes on their economic importance and a few ecological characters. To make this paper more practical only a few outstanding morphological features of the plants have been described. An artificial key is also given for convenience of identification.
336. **Shiv, Chanchala, Shrivastava, R.K. & Dube, K.K. 2016.** "Preliminary studies on physico-chemical parameters of river Temar, district Jabalpur (M.P)". *Life Sci. Bull.* 13(1): 25–28. Abstract: The total environment is a complex entity of which water is the essential component for survival of all the living beings. Life in aquatic environment is largely governed by physico-chemical characteristics and their stability in ecosystem. The precipitation which is the main source of water gets contaminated as soon as it reaches on the earth's surface and during its flow anthropogenic activities in surrounding area further add impurities in it. The water samples were collected monthly for a period of one year from different sampling stations along the stretch of river. During study period, river maintained well alkaline nature of water in study area. Parameters like dissolved oxygen, conductivity, total hardness, total alkalinity and pH showed variation from upstream to downstream. Dissolved oxygen was found to be maximum during winter may be due to low temperature. However, conductivity, total hardness and total alkalinity were found to be maximum during the summer season.
337. **Shrivastava, Aruna & Sharma, V.L. 2011.** "Effect of biotic factors on plant succession of Govt. D.B. Girls P.G. College Campus Raipur (C.G)". *Indian J. Appl. Pure Biol.* 26(1): 57–61. Abstract: Vegetation is defined as organized plant cover of a region. Qualitative & quantitative approaches are being attempted for understanding the structural and functional aspect of vegetation. Both vegetation & soil are results of five groups of factors such as climate, parent rock, relief, organism & time. In a particular ecosystem soil & vegetation develop together & in the same direction. Succession direction & inter community change & can be considered as a progressive development from a simple to

a more complex community. There are significant changes occurring both in soils & plant during the course of an ecological succession and these are related to time sequence of events and a parallelism is established between vegetation succession and the soils development in a given ecosystem. Secondary succession is a short term affair and usually gets submerged in primary succession. Disturbing agents such as grazing, trampling and fire building construction fore tells the characteristics of secondary succession which are typified by internal adjustment and orderly changes in primary succession. Grassland vegetation of college campus has been studied and all the lines of succession are observed leading to the same maximum developed stage in succession of weeds. The climatic climax is represented by a mixed deciduous type of forest of *Acacia leucophloea*, *Delbergia sissoo*, *Caesalpinia pulcherrima*, *Cassia fistula*, *Casuarina*, *Delonix regia*, *Bauhinia purpurea* etc. The weeds occur at every possible place during monsoon. The present paper is an attempt to reveal various probable lines of succession. After years of observation it is found that years after year the vegetation is in the same state of secondary succession due to biotic interferences, though number of species may vary with very little or no change in distribution of plant species and their numbers within this vegetation.

338. **Shrivastava, J.L. 1987.** *Ecological study of flora of Jabalpur town and its neighbourhood*. Ph.D. Thesis, Rani Durgavati University, Jabalpur (unpublished).
339. **Shrivastava, J.L. & Oommachan, M. 1993.** Statistical synopsis of the flora of Jabalpur town and its neighbourhood. In: Gupta, B.K. (ed.), *Higher Plants of Indian Subcontinent*. Vol. IV (*Indian J. Forest., Addit. Ser. VII*). Bishen Singh Mahendra Pal Singh, Dehra Dun. Pp. 187–221. Abstract: 443 species belonging to 332 genera under 108 families of angiospermic plant has been collected from Jabalpur town and its neighbourhood, Madhya Pradesh. Within which 443 species 371 species belong to dicot and rest 72 belongs to monocots.
340. **Shrivastava, J.L. & Oommachan, M. 1994.** “The exotic flora of Jabalpur district—M.P.”. *J. Econ. Taxon. Bot.* 18(2): 279–292. Abstract: The paper enumerates 2 exotic species of gymnosperms and 155 exotic species of angiosperms which are cultivated or naturalised in Jabalpur district of Madhya Pradesh.
341. **Shrivastava, J.L., Masih, S.K., Homkar, U. & Tiwari, V. 2011.** “Assessment and status of sacred groves in Hoshangabad district of Madhya Pradesh”. *J. Trop. Forest.* 27(1): 65–73. Abstract: During the study, 12 forest ranges of Hoshangabad district, Satpura reserve and Pachmarhi were covered. A total of 78 sacred groves were identified from the Hoshangabad district of Madhya Pradesh. The details of identified sacred groves with name of tehsil and forest ranges, forest compartment number in which the sacred grove is situated, name of sacred grove, name of god and goddess worshiped, area

- covered by sacred grove (in sq. m.), period of existence (in number of years) and location of sacred grove from neighbouring village are discussed in the paper.
342. **Shrivastava, M.1994.** "Survey of wild plants of Chhindwara district, Madhya Pradesh". *Ancient Sci. Life* 14(1-2): 82–85. Abstract: The present note includes 29 wild plants of Chhindwara District which are used as food by Gond and Bharia tribes of the District.
343. **Shrivastava, M.2018.** "Physico-chemical studies of Govindgarh Lake, Rewa (M.P.) with special reference to phytoplanktons". *Int. J. Bot. Stud.* 3(1): 50–54. Abstract: Present investigations were carried out on the physicochemical studies of Govindgarh lake Rewa (M.P.) with special reference to phytoplanktons. Present investigation has been conducted on Govindgarh lake Rewa of Madhya Pradesh with special reference to its zooplankton diversity in relation physico-chemical characteristics. The maximum of total phytoplankton was recorded in winter (December) and summer (April) due to suitable range of temperature. The members of Bacillariophyceae dominated in phytoplankton population. Poor representation was made by the members of Euglenophyceae.
344. **Shrivastava, M.P.1956.** "Hydrophytes of Sagar lake". *Bull. Bot. Soc. Univ. Sagaur* 8(1): 34–37. Abstract: In the present paper forty four species of hydrophytic plant has been reported from Sagar lake, M.P. along with habit and flowering seasons.
345. **Shukla, A.N. & Singh, K.P. 2008.** "Diversity of woody plants in Achanakmar Amarkantak Biosphere Reserve, Central India". *Indian J. Forest.* 31(2): 269–282. Abstract: The woody plants of Achanakmar-Amarkantak Biosphere Reserve, Madhya Pradesh and Chhattisgarh have been dealt with. The critical study on collections as well as published literature revealed the occurrence of 168 species belonging to 114 genera and 44 families. A systematic enumeration of the species along with their habit, flowering and fruiting periods, uses and localities have been provided.
346. **Shukla, A.N. & Singh, K.P. 2012.** "Contribution to the flora of Achanakmar-Amarkantak Biosphere Reserve, Central India". *Indian Forester* 138(1): 22–26. Abstract: The paper enumerates 137 taxa as new to the flora of Achanakmar-Amarkantak Biosphere Reserve. Correct nomenclature, family name, locality and field number of each taxon has been provided.
347. **Shukla, A.N., Kumar, B. & Srivastava, S.K. 2010.** "Floristic composition and vegetation types of Rewa district in Madhya Pradesh: An overview". *Ann. Forest.* 18(2): 283–296. Abstract: The paper presents the floristic diversity and vegetation types of Rewa district in Madhya Pradesh. The vegetation of the district is mainly tropical mixed deciduous forest, scrub and thorn forest, ravenous vegetation and grasslands. The survey and documentation of the plant species in the different forest areas of Rewa have resulted in the documentation of 797 species belonging to 500 genera under 125 families of flowering plants. Floristic analysis of data shows that the family Poaceae shows maximum

diversity represented by 101 species, followed by Fabaceae with 65 species, Cyperaceae with 37 species, Asteraceae with 36 species, Euphorbiaceae with 31 species etc. Genus *Ficus* is the dominant genus comprising 12 species, followed by *Cyperus* with 11 species, *Fimbristylis* with 11 species, *Ipomoea* with 9 species, *Cassia* with 8 species etc. A brief account of area, climatic conditions, vegetation types, floristic analysis and a brief note on economic plants, invasive and threatened taxa have been discussed.

348. **Shukla, B.K. 1986.** "The family Asteraceae in Madhya Pradesh". *J. Econ. Taxon. Bot.* 8(2): 373–418. Abstract: The present paper aims to give a comprehensive account of family Asteraceae (Compositae) in the State of Madhya Pradesh in Central India. Salient features of family, keys to genera and species are given for easy identification. For each species botanical descriptions is given supported by ecological notes, flowering and fruiting periods.
349. **Shukla, B.K. & Roy, G.P. 1983.** "A contribution to the grass flora of Madhya Pradesh-II. Some grasses new to flora of Madhya Pradesh". *J. Econ. Taxon. Bot.* 4: 283–286. Abstract: Eight species, viz. *Paspalum plicatulum* Michx., *Phalaris minor* Retz., *Pseudoraphis brunoniana* Griff., *Rhynchelytrum villosum* (Parl.) Chiov., *Saciiolepis indica* (Linn.) A. Chase, *Setaria barbata* (Lamk.) Kunth, *Garnotia tenella* (Arn. ex Miq.) Jan. And *Gigantochloa hasskarliana* (Kurz) Baker ex Heyne has been recorded for the first time for the flora of Madhya Pradesh.
350. **Shukla, B.K. & Roy, G.P. 1984.** "Genus *Euphorbia* L. in Madhya Pradesh". *J. Econ. Taxon. Bot.* 5: 1095–1104. Abstract: Present paper in revision of genus *Euphorbia* L. in Madhya Pradesh state. In the present study 23 species have been included based on up to date nomenclature. Generic description, key to species, brief description supported with ecological notes have been provided.
351. **Shukla, B.K. & Roy, G.P. 2004.** "Floristic composition of Singrauli coal mines area". *Bull. Bot. Surv. India* 46(1-4): 226–245. Abstract: Singrauli is situated southern corner between Uttar Pradesh and Madhya Pradesh. It falls under the district Sonbhadra of Uttar Pradesh and Sidhi of Madhya Pradesh. The entire mining area is represented by dry deciduous forests, degraded forests with dominant species of *Madhuca longifolia* var. *latifolia* (roxb.) Chevalier. About 180 species belonging to 145 genera of 59 families have been collected from the coal mines area. The paper deals with the systematic enumeration of all species collected from the area along with ecological notes. Pollution aspects and conservation measures have been discussed.
352. **Shukla, R.B. & Jain, P.C. 1984-85.** "Weed flora of paddy crops in Chhatisgarh region (M.P.)". *Bull. Bot. Soc. Univ. Saugar* 30 & 31: 43–47. Abstract: An extensive survey of weeds from rice fields of Chhatisgarh region was carried out. The weeds of both the seasons i. e., summer and rainy were enumerated in the present investigation.

353. **Shukla, U. & Panigrahi, G. 1972.** "Contribution to the botany of Madhya Pradesh. VII. (Gramineae excluding Bambusae)". *Bull. Bot. Surv. India* 9(1-4): 268–276. Abstract: This paper presents an enumeration of 161 species of the family Gramineae. Notes on habitat, flowering and fruiting condition, exact localities from where species have been collected together with the field nos. of the collectors', abundance in the area, are appended to every species enumerated.
354. **Sikarwar, R.L.S. 1991.** *Botany of Morena district (M.P.)*. Ph.D. Thesis, Jiwaji University, Gwalior (Unpublished).
355. **Sikarwar, R.L.S. 1996.** "Life forms and biological spectrum of the flora of Morena district, Madhya Pradesh". *J. Indian Bot. Soc.* 75: 275–277.
356. **Sikarwar, R.L.S. 2002.** "Floristic diversity in Chambal ravines of Madhya Pradesh". *J. Econ. Taxon. Bot.* 26(1): 55–65. Abstract: The Chambal river rises in Indore district of Madhya Pradesh and flows majestically in Chambal division. The either side banks of the Chambal River and its tributaries are badly eroded up to width of about 2 to 6 km. And forming deep ravines. These ravines have extended a safe sanctuary for the dacoits since long time. The gross Chambal ravines area of Chabal division is about 16.7 lakh acres. The climatic condition of the area is arid type due to which the vegetation in general shows xerophytic features and chiefly dominated by thorny scrubs like *Acacia leucophloea* (Roxb.) Willd., *A. nilotica* (L.) Del. Subsp. *indica* (Benth.) Brenan, *Balanites aegyptiaca* (L.) Del., *Capparis deciduas* (Forsk.) Edgew., *C. sepiaria* L., *Dichrostachys cinerea* (L.) Wight & Arn., *Prosopis cineraria* (L.) Druce, *P. julifera* (Sw.) DC., *Salvadora persica* L. and *Ziziphus nummularia* (Burm.f.) Wight & Arn etc. The present paper deals with the diverse floristic wealth of Chambal ravines of Madhya Pradesh along with the vegetational account of the region. Agarkar (1969) has enumerated 125 plants from Chambal Valley ravines. During the floristic study of Morena district of Madhya Pradesh from 1986-1989, it was found that 78 species are not recorded by Agarkar. The species diversity of the area bring to light 203 species under 145 genera and 57 families of angiosperms and out of which 166 species, 120 genera and 51 families belong to dicotyledons and 37 species, 25 genera and 6 families belongs to monotyledons.
357. **Sikarwar, R.L.S. 2007.** "Floristic diversity of Kamadgiri (the Chitrakoot hill) – A most ancient sacred grove of India". *Phytotaxonomy* 7: 66–77. Abstract: The Kamadgiri (Chitrakoot hill) is most sacred and legendry hill of pilgrimage of Hindus. It is situated on the border of Satna district of Madhya Pradesh and Chitrakoot (Karwi) district of Uttar Pradesh. Extensive survey of Kamadgiri conducted during 2004-2007 yielded 210 species under 149 genera and 55 families. Out of these 2 species, 2 genera and 2 families belong to Pteridophytes and 208 species, 147 genera and 53 families of angiosperms; among the angiosperms, 171 species, 121 genera and 47 families belong to dicots and 37 species, 26 genera and 6 families to monocots.

358. **Sikarwar, R.L.S. 2010.** "The herbal garden and herbarium of Arogyadham, Deendayal Research Institute, Chitrakoot, Dist. Satna, M.P.". *Phytotaxonomy* 10: 139–142. Abstract: Deendayal Research Institute (DRI) has established a unique research centre called Arigyadham (J.R.D. Tata Foundation for Research in Ayurveda and Yoga Sciences) at Chitrakoot in Satna district of Madhya Pradesh. The area of herbal garden is about 5 acre. The garden contains nearly 500 different medicinal and RET taxa under the categories herbs, shrubs, trees and climbers. More than 80% of the plants are collected from Chitrakoot region, while the rest were collected from different parts of the country. It plays a important role in strengthening the rural wealth and its conservation and utilization for sustainable development.
359. **Sikarwar, R.L.S. 2011.** Chitrakoot Forests: A treasure of Cultural and Biological diversity. In: Singh, Pratibha, Shrivastav, R. & Dubey, R.K. (Eds.), *Forest Biodiversity: Earths Living Treasure*. U.P. State Biodiversity Board, Lucknow. Pp.62–67.
360. **Sikarwar, R.L.S. 2014.** "Angiosperm diversity assessment of Chitrakoot: The legendary Place of Vindhyan Range, India". *J. Econ. Taxon. Bot.* 38(3-4): 563–619. Abstract: Chitrakoot (The hill of many wonders) is a one of the famous holy place for the pilgrimage of Hindus in India and surrounded by lush green hills of legendary Vindhychal range. It has been very rich in forest biodiversity since ancient times. Chitrakoot's spiritual legacy stretches back to legendary ages. It was in these deep forests that Lord Rama, consort Sita and his brother Lakshmana spent eleven and half years of their fourteen years of exile. The richness of biodiversity has been described in various ancient literatures. But at present the biodiversity of Chitrakoot is reduced to a great extent due to unsustainable human activities. A detailed study on plant biodiversity, hreat assessment, conservation and ethnobotany has been carried during 2003-2011. A total number of 743 species under 472 genera belonging to 118 families are recorded. Out of these, 574 species under 361 genera and 93 families belong to dicots and the remaining 169 species under 111 genera and 25 families belongs to monocots.
361. **Sikarwar, R. L.S. 2014.** Plant Diversity of Kamadgiri Hill (Chitrakoot). In: Krishna, Nanditha (Ed.) *Ecological Traditions of India. Vol. IX Madhya Pradesh & Chhattisgarh*. CPR Environmental Education Centre, Chennai. Pp. 57–79.
362. **Sikarwar, R.L.S.2016.** Past and present biodiversity of Chitrakoot-An ancient religious place of India. In: Shete, R.H. (Ed.) *Biodiversity for Human Welfare*. Indian Botanical Society, India. Pp. 289–296.
363. **Sikarwar, R.L.S.& Kaushik, J.P. 1993.** "Wall flora of Gwalior Fort, Madhya Pradesh". *J. Econ. Taxon. Bot.* 17(3): 627–631. Abstract: The present paper deals with the wall flora of Gwalior Fort, Madhya Pradesh. 67 species in 60 genera and 29 families have been enumerated.

364. **Sikarwar, R.L.S. & Kaushik, J.P. 1994.** "Additions to the flora of Madhya Pradesh". *J. Bombay Nat. Hist. Soc.* 91(1): 170–171.
365. **Sikarwar, R.L.S. & Kaushik, J.P. 1995.** "General aspects of the vegetation of Morena district, Madhya Pradesh". *J. Econ. Taxon. Bot.* 19(1): 47–54. Abstract: The paper presents an account of general aspects of the vegetation of the Morena district in Madhya Pradesh. The vegetation of this area is tropical dry deciduous type comprised of thorny bushes in ravines which merge into the mixed deciduous forests on hills and plateaus.
366. **Sikarwar, R.L.S. & Kaushik, J.P. 1995.** "Flora of Morena district, Madhya Pradesh". *J. Econ. Taxon. Bot.* 19(1): 75–112. Abstract: A comprehensive account of the plants of Morena district of Madhya Pradesh has been presented in this paper. Based on the explorations carried out by the authors during the year 1986-1989, 588 species of angiosperms under 388 genera and 106 families are enumerated.
367. **Sikarwar, R.L.S. & Kaushik, J.P. 1997.** "Family Cyperaceae of Morena district in Madhya Pradesh". *J. Econ. Taxon. Bot.* 21(3): 607–614. Abstract: The present paper deals with the systematic study of 6 genera and 24 species of family Cyperaceae found in Morena district of Madhya Pradesh. Artificial key to the genera and species based on morphological characters are given.
368. **Sikarwar, R.L.S. & Kaushik, J.P. 1997.** "Aquatic and semi-aquatic plants of Morena district, Madhya Pradesh". *J. Econ. Taxon. Bot.* 21(3): 639–647. Abstract: The present paper deals with the aquatic and semi-aquatic angiosperms of Morena district of Madhya Pradesh. 135 species under 104 genera belonging to 50 families are dealt here. Of these 64 species are of dicotyledons. Geography, climate, habit, phenology, distribution and collection number have also been given.
369. **Sikarwar, R.L.S. & Kaushik, J.P. 1999.** "Observations on the weeds of mustard fields in Morena district (M.P.)". *Vasundhara* 4: 56–64.
370. **Sikarwar, R.L.S. & Tiwari, Arjun Prasad. 2014.** "Additions to the flora of Madhya Pradesh". *Phytotaxonomy* 14: 100–102. Abstract: During the recent floristic survey of four different districts of Madhya Pradesh (Alirajpur, Rewa, Satna and Sidhi) and based on the studies of specimens deposited in BSA, six angiospermic taxa, viz., *Phyllocephalum phyllolaenum* (DC.) Narayana, *Spilanthes radicans* Jacq., *Physalis angulata* L., *P. lagascae* Roem. & Schult., *P. pruinosa* L. and *Brachiaria mutica* (Forssk.) Stapf hitherto unreported, were collected, are recorded here as new additions to the flora of Madhya Pradesh.
371. **Singh, Arvind. 2011.** "Exotic flora on coal mine spoils of Singrauli coalfields". *Indian Forester* 137(6): 792–795. Abstract: A total 130 plant species were reported growing on coal mine spoils of Singrauli coalfields. Of these 57 species were represented by exotic plants. Thus the percentage contribution of exotics on mine spoil is 43.84. Of the

reported 57 exotic plant species, 33 were represented by herbs (57.89%), 18 by tree (31.57%) and the remaining 6 by shrubs (10.52%). Among the 57 exotic flora reported, 36 belongs to natural category of plant species (63.15%), 14 belongs to the planted category of plant species (24.56%), 4 belongs to planted and natural category of plant species (7%) and remaining 3 belongs to seeded category of plant species (5.26%). Generally woody species are planted and herbaceous legumes are seeded to accelerate and compact the process of succession.

372. **Singh, J. & Patel, K.K. 2016.** "Effect of mining on Sal mortality in Kotma Range of Anuppur Forest Division of Madhya Pradesh". *J. Trop. Forest.* 32(2): 60–70. Abstract: Large scale mortality in Sal (*Shorea robusta*) trees occurred in Kotma and Jethari forest ranges of Anuppur Forest Division in Madhya Pradesh. Coal mining is done in this area and it was suspected that this mining activity could be one of the main causative factors for mortality of sal trees. Accordingly, a study was conducted to study the effect of coal mining on the physico-chemical properties of soil, establishment of sal regeneration and disease and mortality in sal trees. Two locations, one in close proximity to the mining site and the other far away from the mining area, were selected for the comparative study. It has been observed that coal mining adversely affects the establishment of natural regeneration as a result of change in physico-chemical properties of soil due to deposition of suspended coal dust. It also causes root-decay and mortality in sal.
373. **Singh, K.P., Shukla, A.N., Bondya, S.L. & Mishra, S. 2010.** "Flowering plants of Achanakmar-Amarkantak Biosphere Reserve, Central India". *J. Non-Timber Forest Prod.* 17(1): 101–133. Abstract: Flowering plants of Achanakmar-Amarkantak Biosphere Reserve have been studied. The systematic collection in the biosphere reserve in different seasons and subsequent their investigations together with earlier reports have resulted in the documentation of 1016 species, distributed under 574 genera and 143 families. All the species are presented in tabular form providing the information on family, habit, collection site, collector's name and collection number.
374. **Singh, L., Sharma, B. & Agrawal, R. 2003.** "Species composition and plant diversity of a representative tropical moist deciduous forest of Achanakmar Sanctuary". *J. Trop. Forest.* 19(1&2): 25–34. Abstract: Species composition and species diversity were studied on two sites of a tropical moist deciduous forest. The forest was characterized by high density of trees (1040-1290 stems ha<sup>-1</sup>) and understorey vegetation (1100-1800 stems ha<sup>-1</sup>) on closed forest site compared to open forest site which represents 390-930 stems ha<sup>-1</sup> and 700-1090 stems ha<sup>-1</sup> of trees and understorey vegetation, respectively. Basal cover too was high for both trees and understorey vegetation and ranges from 25.4 to 44.85 m<sup>2</sup> h<sup>-1</sup> and from 1.02 to 2.84 m<sup>2</sup> h<sup>-1</sup> for trees and under storey vegetation, respectively. Similar to plant density, basal cover was also low in open forest sites and ranges from 20.05 to 45.85 m<sup>2</sup> h<sup>-1</sup> and 0.28 to 0.47 m<sup>2</sup> h<sup>-1</sup> for trees and shrubs,



respectively. Similarly, diversity was also high on closed forest site than on open forest site. The ranges of diversity on these sites were 1.99-2.92 (Shannon index), 1.43-4.76 (richness index) and 0.78-1.04 (equitability index). The beta diversity was high on open forest.

375. **Singh, N. & Dixit, A.K. 2017.** "Melissopalynological studies of Amadobh region, Bilaspur district, Madhya Pradesh". *Int. J. Bot. Stud.* 2(3): 42–51. Abstract: Melissopalynology manages the investigation of pollen grains exhibit in a specific honey sample. The nature of honey relies on the recurrence of pollen grains introduce in a specific honey test. The present study has been led on the winter season (January-February), summer season (April-May) and rainy season (August-September) of honey gathered from Amadobh area of Bilaspur region, Chhattisgarh, India., total 58 types of pollen grains belonging 58 genera and 28 families have been found. The summer season honey has been portrayed as unifloral in view of the presence of *Butea monosperma* (Lam.) Taub. pollen grain with 53.3% as dominant plant species. Whereas other two seasons samples were reported as multifloral honey. Color, pH, moisture %, ash %, Total solids and sugars were analyzed as physicochemical characterization of the collected honey samples. Fiehe's test, Lugol's response and Lund's response was performed to uncover the contaminated and adulteration of honey samples. The color of the honey is varied from light brown, golden yellow to golden brown. The range of pH is 4.01-4.6, moisture % is 16-19, ash % is 0.001-0.16, total solid % is 80-82, fructose is 36.28-39.06g/100g, and glucose is 29.16-33.85g/100g. All of the outcomes fall inside the international standard point of confinement. This study is valuable for examination of immaculateness of honey.
376. **Singh, N.P., Khanna, K.K., Mudgal, V.& Dixit, R.D.2001.** Flora of Madhya Pradesh. Vol. III. Angiosperms (Hydrocharitaceae to Poaceae) and Gymnosperms. Botanical Survey of India. Calcutta. Abstract: The present book deals with an account of 706 species of angiosperms belonging to 241 genera and 37 families (Hydrocharitaceae to Poaceae) and 7 species of Gymnosperms (mostly cultivated) under 5 genera and 4 families.
377. **Singh, N.P., Khanna, K.K. Mudgal, V. & Dixit, R.D. 2001.** *Flora of Madhya Pradesh*, Vol. III. Botanical survey of India, Calcutta.
378. **Singh, P., Jamaluddin & Purohit, M. 1988.** "Studies on growth and development of some forest tree species in red mud soil Balco Korba". *Indian Forester* 114(5): 285–288. Abstract: An attempt has been made to introduce suitable forestry species in red mud soils of Balco Korba to reclaim the waste sites which are depleted due to industrial waste. The results in detail have been discussed in this paper.
379. **Singh, R. & Samdariya Priti.2007.** "Periphyton as bio-indicators of water pollution at four wetlands of Satna (M.P.)". *J. Bot. Soc. Univ. Sagar* 42: 146–149. Abstract: With an

increase in human population water resources are under great stress, due to numerous human activities and become the subject of detailed scientific investigation. During present investigation 33 pollution tolerant species were recorded from four major sites of Satna. Wetlands of Satna district are categorised as eutrophic because 23 pollution tolerant species of algae were found in the wetlands of Satna town, 20 in wetland of Unchehara, 19 at Majhgawan, 15 genera were recorded from Maihar.

380. **Singh, R.B., Singh, A.K. & Banerjee, S.K. 1999.** "Species diversity and soil variability in *Shorea robusta* forests in an around Motinala (M.P.)". *Advances Pl. Sci. Res. India* 9: 1–13. Abstract: A field survey was carried out to study species diversity and soil variability in sal (*Shorea robusta*) forests at Motinala (site I and II) and Mawai (site III) in Mandla East Forest Division (M.P.). Motinala site I and II exhibited better soil properties than Mawai except available  $K_2O$ . Variability of soil pH and organic carbon in perpendicular transects (North-south and East-west) showed more variations and heterogeneity at Motinala I and Mawai. Directional variations do not show any definite pattern. Effect of individual tree on soil pH was, though non-significant but it increased with distance from main stem, while organic carbon exhibited a significant increase. Motinala site I showed over all more heterogeneity followed by Mawai and Motinala site II. Phytosociological parameters like density, IVI and coefficient of dominance were higher at site I and III as compared to site II. Diversity index was almost similar on both the sites of Motinala. Comparison of sites showed 0.57 similarity index. Species diversity was directly related with soil heterogeneity.
381. **Singh, Sanjay, Verma, A.D. & Naik, R. 2017.** "Study on regeneration of tree species in TFRI campus plantations, Jabalpur, Madhya Pradesh". *Indian J. Trop. Biodiv.* 25(1): 20–30. Abstract: The present study investigates the status of regeneration of different (planted and native) tree species of Tropical Forest Research Institute (TFRI) campus. Vegetation present in the campus represents a unique mix of native and non-native plants, which are coexisting and regenerating. Plantations were undertaken in 109 ha of the campus area in form of experimental trials, avenue plantation, *ex-situ* conservation, progeny trials, provenance trials, etc. A total of 98 tree species were recorded from the campus area, of which 18 species showed regeneration and establishment. Both native and planted species are successfully regenerating in the campus. The most successfully regenerating species in the campus is *Leucanea leucocephala*. The other non-native planted species showing successful regeneration is *Santalum album*. The plantations are also support regeneration of native species like *Butea monosperma*, *Acacia catechu*, *Diospyros melanoxylon*, *Anogeissus pendula*, *Mallotus phillippensis*, *Grewia asiatica*, *Buchanania lanzen* and *Bombax ceiba*. *Leucanea leucopholea* is an invasive species and needed to be removed in a phased manner, however the species acts as nurse plant for *Santalum album*, which is a partial root parasite.

382. **Singh, V. 1982.** "The Cyperaceae of Gwalior Forest Division, Madhya Pradesh I". *Bull. Med.-Ethno-Bot. Res.*3: 43–56.
383. **Singh, V.P. 2014.** *Flora of Madhya Pradesh (Western Part)*. Scientific Publishers, Jodhpur. Abstract: The book represents an account of the flora of M.P. with special reference to western parts included six districts only. Total 980 species of angiosperms under 148 families are reported in this book. Within 980 species, 791 species from dicot and 189 species from monocot.
384. **Singh, V.P. & Khare, V.S. 1996.** *Flora of Ujjain district*. Periodical Expert Book Agency, Delhi.
385. **Sinha, B.K. & Sharma, P. 2006.** "The woody plants of Pachmarhi Biosphere Reserve (M.P.) and their economic potential". *J. Econ. Taxon. Bot.* 30(4): 989–1019. Abstract: The woody plants of Pachmarhi Biosphere Reserve, M.P. have been dealt. The scrutiny of the collections and the literature consulted revealed the occurrence of 199 species belonging to 139 genera and 57 families of the woody plants within the area. The systematic enumeration of the species along with short description, flowering and fruiting periods and distribution have been provided. The species have been arranged as per Bentham and Hooker system of classification (1862-1883).
386. **Sinha, B.K. & Shukla, B.K. 2006.** "Taxonomic studies on the grasses of Panchmarhi Biosphere Reserve, Madhya Pradesh (India)". *J. Econ. Taxon. Bot.* 30(4): 913–946. Abstract: The present paper deals the systematic account of the grasses of Pachmarhi Biosphere Reserve with generic and specific keys. The grasses of the Biosphere Reserve belong to 69 genera and 129 species. The dominant genera of this area are *Eragrostis* (9 species), *Panicum* (6 species), *Setaria*, *Sporobolus* and *Digitaria* (5 species each), *Pennisetum* and *Bothriochloa* (4 species each). The current nomenclature with brief description, ecological notes, distribution and economic/miscellaneous importance of grasses has been provided. Since grasses are the palatable source of food for herbivore animals and initial point for flow of energy in the reserve, the present information will be very useful in developing conservation strategies.
387. **Sinha, B.K. & Shukla, B.K. 2007.** "Synoptic flora of Khargone district Madhya Pradesh-I". *J. Econ. Taxon. Bot.* 31(2): 487–535. Abstract: The present paper deals with the flora of Khargaon district, Madhya Pradesh. Part one includes the pteridophytes and angiosperms from Ranunculaceae to Mimosaceae. Economic potentiality of flora has also been discussed, besides vegetation types and abiotic components of the area.
388. **Sinha, B.K. & Shukla, B.K. 2007.** "Synoptic flora of Khargone district Madhya Pradesh-II". *J. Econ. Taxon. Bot.* 31(3): 643–695. Abstract: The present paper is in continuation with Part I published in *Journal of Economic & Taxonomic Botany* volume 31(2). The remaining part of the flora of Khargaon district will be published in due course.

389. **Sinha, B.K. & Shukla, B.K. 2009.** "Synoptic flora of Khargone district Madhya Pradesh-III (Hydrocharitaceae to Poaceae)". *J. Econ. Taxon. Bot.* 33(1): 120–147. Abstract: The present paper deals with the systematic account of the synoptic flora of Khargaon district, Madhya Pradesh-III, family Hydrocharitaceae to Poaceae with generic and specific keys. The monocot families of the region belong to 131 species, 93 genera and 19 families. The correct nomenclatures with brief description, ecological notes and distribution of each species have been provided.
390. **Sinha, B.K., Srivastava, S.K. & Dixit, R.D. 2002.** "Potential economic legumes of Chhattisgarh and Madhya Pradesh, India". *J. Econ. Taxon. Bot.* 26(3): 587–596. Abstract: The paper presents an enumeration of 122 plant species belonging to 62 genera of legumes from Chhattisgarh and Madhya Pradesh states, with their economic potential value into medicinal, edible, timber, fibre, dyes, fodder, gums, ornamentals and other miscellaneous.
391. **Sisodiya, M.K. 2012.** *Study of Floristic composition and phytoresources of Barwani district.* Ph.D. Thesis, P.M.B. Gujarati Science College, Indore (M.P.), (Unpublished).
392. **Solanki, C.M. 1984.** *Flora of Indore.* Ph.D. Thesis. Devi Ahilya Vishwavidyalaya, Indore (unpublished).
393. **Sondhi, G.S. 1954.** "The forests of Madhya Bharat". *Indian Forester* 80: 810–815. Abstract: The Madhya Bharat Forest Department, with its numerous problems, came into existence in 1948. The forests are mostly tropical deciduous with a variety of forest produce and wildlife. Most of the tree crop is ruined due to over exploitation. New working plans are to be prepared for some forests. The old ones are to be revised on the basis of Silvicultural research. Regeneration is mostly through repeated coppice, with few plantations. The 'Van Mahotsava' has given impetus to 'extension forestry'. Soil conservation work is confined to anti-erosion and afforestation works. Uplift of forest village population, particularly Adivasis, is given due attention.
394. **Soni, V., Modak, M. & Nema, M. 2012.** "Taxonomic Observations on Family Bignoniaceae of Bhopal, Madhya Pradesh". *Int. J. Life Sci. & Med. Res.* 2(4): 108–111. Abstract: The present paper aimed to study the phytodiversity of family Bignoniaceae in Bhopal of Madhya Pradesh, India. A total of 11 species belonging to 10 genera were recorded from Bhopal, out of these 7 species belonging to 6 genera are newly reported. Present study dealt with the artificial key to identify various genera, their taxonomic account and analysis of species under different headings like, dominant, rare and new reported species. The species like *Cydista aequinoctialis* were found to be the dominant species. The presence of the following species like *Dolichandrone falcata*, *Heterophragma adenophyllum* and *Oroxylum indicum* indicates the presence of wilderness within the study area.

395. **Srivastava, A., Kumbhare, V. & Bhargava, A. 1996.** "Phytochemical screening of some multipurpose tree species of Jabalpur (Madhya Pradesh)". *Indian J. Forest.* 19(1): 31–34. Abstract: Twenty two multipurpose tree species (MPTs) were screened phytochemically for the evaluation of their economically important active chemical constituents, viz., alkaloids, flavonoids, tannins, saponins, glycosides and steroids. Alkaloids, saponins and flavonoids were found to be present in 50%, 59% and 45% of the total plants screened respectively.
396. **Srivastava, J.P. 1948-49.** "An ecological study of the vegetation of Sagar Lake". *Bull. Bot. Soc. Univ. Saugar* 1 (1&2): 7–9. Abstract: The morphology and anatomy of the aquatic plants, their mode of life, development, reproduction and growth, community life, succession and a detailed, understanding of the environment have been the most important aspects so far actively pursued. The causal factors for the distribution of the plants in lakes have been much studied. In spite of the huge mass of data and the knowledge so far built up round the subject there remains sufficient scope for the study of Limnology of the tropical lakes. With this end in view, a survey of the vegetation of Sagar lake has been undertaken. The survey comprises a study of the physical features of the lake and an analysis of the environment and the vegetation. Special attention has been paid to the nature of the lake bottom with, a view to correlate analytical data of the mud and the rooted plants growing thereon.
397. **Srivastava, R. 2006.** "Market potential of Aonla fruits for upliftment of rural economy in Panna district". *J. Trop. Forest.* 22(1&2): 8–12. Abstract: Panna is a tribal dominated and a forest resource rich district of Madhya Pradesh. Aonla fruits were used to be collected and sold through local traders at very low prices. Most of the fruit was plucked early and sold as dry Amrethi. However, contractual sale of Aonla, at State level, by the M.P. Minor Forest Produce (Trade and Development) Federation increased the net gains to the fruit Collectors by eight fold. A total of 10,000 quintals of fruit was collected in North Panna Division with a disbursement of Rs. 50 lakhs as collection wages. Systematic collection and organized marketing of the fruit will augment the meager resources of the rural people of Panna district. A survey of the families conducted in North Panna Division has been depicted in the paper.
398. **Srivastava, R.C. 1983.** "Insectivorous plants of Madhya Pradesh— A taxonomic study". *J. Econ. Taxon. Bot.* 4: 185–191. Abstract: The paper presents an account of the insectivorous plants of Madhya Pradesh. Two genera of such plants viz. *Drosera* L. (Droseraceae) and *Utricularia* L. (Lentibulariaceae) are represented in the state by 15 species viz., *Drosera burmani* Vahl., *D. Indica* L., *Utricularia arenaria* A. DC., *U. aurea* Lour., *U. australis* R. Br., *U. baouleensis* A. Chev., *U. bifida* L., *U. caerulea* L. [and var. *graminifolia* (Vahl.) Bhattacharya], *U. exoleta* R. Br., *U. hirta* Klein ex Link, *U. polygaloides* Edgeworth, *U. pubescens* Sm., *U. scandens* Benj., *U. stellaris* L.f. and *U. uliginosa* Vahl.

Short description of these along with an up to date synonymy, distribution etc. have been given alongwith artificial keys for the identification of different species and genera.

399. **Srivastava, R.C. 1984.** "The genus *Sonchus* L. (Asteraceae) in Madhya Pradesh". *J. Econ Taxon. Bot.* 5: 1081–1084. Abstract: Present papers gives an account of species of the genus *Sonchus* L. recorded from Madhya Pradesh. An artificial key for the identification of different species is also given.
400. **Srivastava, R.C. 1985.** "Convolvulaceae of Madhya Pradesh". *J. Econ Taxon. Bot.* 7(3): 537–545. Abstract: An account of 16 species belonging to 8 genera of Convolvulaceae viz. *Convolvulus*, *Erycibe*, *Evolvulus*, *Jacquemontia*, *Merremia*, *Operculina*, *Porana* and *Rivea* recorded so far from different localities of Madhya Pradesh has been given along with artificial key to different genera and species.
401. **Srivastava, R.C. 1987.** "Family Verbenaceae of Madhya Pradesh". *J. Econ. Taxon. Bot.* 10(2): 451–469. Abstract: Family Verbenaceae is represented by 17 genera and 31 species in the state of Madhya Pradesh. Their nomenclature, synonym, a brief description of each taxa, phonological data and uses etc (wherever known) of all these taxa are given in this paper alongwith artificial keys to genera and species.
402. **Srivastava, R.C. 1989.** "Flora of Madhya Pradesh: Linaceae and Malpighiaceae". *J. Econ. Taxon. Bot.* 13(1): 187–192. Abstract: In Madhya Pradesh, family Linaceae is represented by 2 genera and four species while family Malpighiaceae is represented by 3 genera and four species. Their correct nomenclature, brief description, phonological data and uses etc. are given in this paper. *Aspidopterys cordata* is being reported as an addition to flora of Madhya Pradesh.
403. **Srivastava, R.C. 1990.** "Flora of Madhya Pradesh: Taxonomic studies on three dicot families". *J. Econ. Taxon. Bot.* 14(2): 443–447. Abstract: Present paper provides an up to date taxonomic account of three dicot families viz. Cornaceae, Ochnaceae and Symplocaceae in Madhya Pradesh.
404. **Srivastava, R.C. 1990.** "A taxonomic study of the family Meliaceae of Madhya Pradesh". *J. Econ. Taxon. Bot.* 14(2): 448–452. Abstract: Present paper provides an up-to-date taxonomic account of the different taxa of family Meliaceae found in Madhya Pradesh. Their correct nomenclature, synonyms, local names followed by a brief description, phonological data, distribution and uses (wherever known) etc. are provided. Key to the genera and species are also given. This family is represented in the state by 8 genera and 9 species
405. **Srivastava, R.C. 1991.** "Olive family (Oleaceae) in Madhya Pradesh" *Proc. Natl. Acad. Sci. India* 61: 195–203.
406. **Srivastava, R.C. 1992.** "Bursereaceae and Passifloraceae of Madhya Pradesh" *Proc. Natl. Acad. Sci. India* 62: 289–293.

407. **Srivastava, R.C. 1992.** "Status of Hydrocharitaceae and Burmanniaceae in Madhya Pradesh" *Proc. Natl. Acad. Sci. India* 62: 399–405.
408. **Srivastava, R.C. & Kumar, A. 1987.** "Parasitic angiosperm of Madhya Pradesh". *J. Econ. Taxon. Bot.* 9: 391–404. Abstract: The present communication deals with the 14 genera & 27 species of parasitic angiospermic plants found in Madhya Pradesh. Their correct identity, nomenclature synonymy, local names, data on flowering/fruitletting and various uses (wherever known) are given alongwith artificial key to different families, genera and species.
409. **Srivastava, R.C. & Kumar, A. 1987.** "Aquatic and marshy angiosperms of Madhya Pradesh". *J. Econ. Taxon. Bot.* 9(2): 433–458. Abstract: The hydrophytic vegetation of Madhya Pradesh State consists of 315 species, 6 subspecies and 11 varieties belonging to 145 genera and 62 families of angiosperms. All these plants have been enumerated along with data on their habit, habitat, flowering/fruitletting period and district-wise distribution.
410. **Srivastava, R.C. & Shukla, B.K. 1984.** "The genus *Blumea* DC. (Asteraceae) in Madhya Pradesh". *J. Econ. Taxon. Bot.* 5: 285–291. Abstract: Present paper aims to present an account of the different species under the genus *Blumea* DC. (Asteraceae), recorded so far, from different localities of Madhya Pradesh. The genus is represented by 13 species viz., *B. bifoliata* (L.) DC., *B. clarkei* Hook. f., *B. eriantha* DC., *B. fistulosa* (Roxb.) Kurz, *B. hieraciifolia* var. *macrostachya* (DC.) Hook. f., *B. lacera* (Burm.f.) DC., *B. laciniata* (Burm. f.) DC., *B. lanceolaria* (Roxb.) Druce, *B. membranacea* Wall. ex DC., *B. mollis* (D. Don) Merr., *B. olivata* (L.) Druce, *B. oxyodonta* DC. and *B. virens* Wall ex DC. An artificial key for the identification of different species is also given.
411. **Srivastava, R.C. & Singh, A.N. 1989.** "The genus *Bauhinia* (Caesalpinaceae) in Madhya Pradesh". *Proc. Natl. Acad. Sci. India* Sec. B.57: 399–404.
412. **Srivastava, R.C. & Singh A.N. 1990.** "The family Lythraceae in Madhya Pradesh". *J. Econ. Taxon. Bot.* 14: 409–420. Abstract: Present paper provides an up-to-date taxonomic account of the members of family Lythraceae in the state of Madhya Pradesh. Present studies have revealed that the family is represented in the state by 6 genera and 16 species. Their up-to-date nomenclature, brief description, phonological data, distribution in area under study, uses etc. are provided along with artificial key to the genera and species.
413. **Srivastava, R.C. & Tripathi, A.K. 1993.** "Taxonomic studies of six dicot families of Madhya Pradesh". *J. Econ. Taxon. Bot.* 17(3): 513–518. Abstract: Present paper provides a taxonomic account of six dicot families viz., Balanitaceae, Caricaceae, Olacaceae, Simaroubaceae and Turnaceae in Madhya Pradesh.
414. **Srivastava, R.C., Panigrahi, G., Sen Gupta G., Lal, R., Singh, M.K. & Singh, V.P.**

- 2005.** "Floristic diversity and its conservation strategies in hilly Sidhi district of Madhya Pradesh". *J. Econ. Taxon. Bot.* 29(3): 666–693. Abstract: A short account of the vegetation and its floristic composition along with other essential features of physiography, climate and soil of Sidhi district of Madhya Pradesh (India) are given in this paper. List of 692 taxa (species and varieties) of flowering plants recorded from different localities of the district and their flowering and fruiting period is also given.
415. **Srivastava, J.P. 1951.** "An ecological study of the vegetation of Sagar Lake". *Bull. Bot. Soc. Univ. Sagar* 1: 7–9.
416. **Srivastava, S.K. 2004.** "Floristic diversity of Bandhavgarh National Park, Madhya Pradesh". *Bull. Bot. Surv. India* 46(1-4): 216–220. Abstract: The paper presents the floristic composition of Bandhavgarh National Park in Vindhyan ranges of North-Eastern Madhya Pradesh. The vegetation of the park is mainly tropical moist deciduous type. The analysis of the flora reveals that it comprises 503 species belonging to 383 genera under 121 families represented in varied vegetation type. Apart from this, large numbers of species are known for their medicinal, timber, fodder and of various other economic uses.
417. **Stewart, J.L. & Brandis, D. 1874.** *The Forest Flora of North-West and Central India.* London.
418. **Subramanyam, K. 1981.** "Distribution of *Utricularia* L. in Peninsular India, south of Vindhyas". *Bull. Bot. Surv. India* 23: 155-164. Abstract: The distribution of 24 species of *Utricularia* in Peninsular India is presented in the present paper. A total of 11 species have been recorded from Andhra Pradesh, 4 species from south Gujarat, 19 species from Karnataka, 16 species from Kerala, 8 species from Madhya Pradesh (Bastar district), 15 species from Maharashtra, 14 species from Odisha, 18 species from Tamil Nadu and 7 species from Goa.
419. **Subramanyam, K. & Henry, A.N. 1966.** "Vascular plants of Bastar, Madhya Pradesh". *Bull. Bot. Surv. India* 8(3&4): 207–215. Abstract: The Bastar area comes under Bastar district of the Madhya Pradesh and lies south of Raipur between 19°0'-21°0' N and 81°0'-82°0'E. The major portion of this area has more or less remained botanically unexplored for and three exploration trips were conducted in the year 1958, 1959 and 1961, and a total number of 481 species representing 336 genera and 112 families were collected. The vegetation at the foot and lower slopes of the hills is of the mixed deciduous type. The undergrowth in these forests is rather sparse. Evergreen forests occur in Kanger Valley, Dharba, Kutamsar and along the upper slopes of Bailadila. The hill-tops, particularly at Dharba and Narayanpur, are rich in grasses and herbs and amidst these terrestrial orchids are also noticed. Since there are a number of tanks at the foot of these hills and in the plains which are wet and marshy during the rainy season,



interesting aquatic and marshy plants are met with.

420. **Suman, N. 2010.** *Studies on the Floristic Diversity and Economic Aspects of Vegetation of Panna Tiger Reserve.* Ph.D. Thesis, H.S. Gour University, Sagar, Madhya Pradesh (unpublished).
421. **Suman, N.R., Khare, P.K., Salunkhe, O. & Chadhar, B. 2017.** "Alien angiospermic plants of Panna Tiger Reserve, Madhya Pradesh, India". *Indian Forester* 143(1): 19–24. Abstract: The paper deals with the enumeration of alien species of Panna Tiger Reserve of Madhya Pradesh, India. In all 75 alien taxa of angiosperms were found and enumerated with the correct botanical names, families, uses, source of origin, life form and their habitats. *Cassia*, *Corchorus* and *Indigofera* are the prominent genera while Asteraceae and Fabaceae are prominent families in the area. Tropical American component dominated the alien flora contributing 63% to the vegetation. Life form-wise herbs were the major forms. Most of the alien species introduced to the area was unintentional; however, a number of them are used for various purposes.
422. **Surage, K. & Solanki, C.M. 2015.** "Fodder grasses of Nimar region (M.P)". *J. Econ. Taxon. Bot.* 39(3-4): 449–453. Abstract: Nimar region, located in south-western Madhya Pradesh, India. The grasslands in the study area are mainly, the plains and the deforested area. The grasslands are under great pressure of grazing and human activities. Grasses are valuable for the live stock. The data regarding the botanical name, regional name and palatability of 69 fodder grasses have been enumerated.
423. **Suri, S.K. 1978.** "Taxonomic enumeration of common plants of Changbhakhar Forest Division, Madhya Pradesh". *Indian Forester* 104(3): 189–201. Abstract: Based on the field studies of flora of Changbhakhar Forest Division (Madhya Pradesh) during stock mapping, taxonomic enumeration of common plants occurring in the Division has been given in this paper.
424. **Thakur, A.S. 2004.** *Vegetation ecology of Sagar district.* Ph.D. Thesis, Dr. H.S. Gour University, Sagar, Madhya Pradesh (unpublished).
425. **Thakur, A.S. & Khare, P.K. 2006.** "Disappearing *Boswellia serrata* Roxb. in Sagar district, Madhya Pradesh". *Indian Forester* 132(6): 889–893. Abstract: The present study showed that among the ten selected sites in the Sagar district, an average of about 25 tree species with more than 30 cm girth were found. Density distribution of different species clearly indicated the dominance of *Tectona grandis*, *Diospyros melanoxylon*, *Butea monosperma*, *Terminalia tomentosa*, *Lannea coromandelica* at most of the sites. A few species did not show their absence from certain sites, but their densities were higher at the sites of their occurrence. It is clearly evident that *Boswellia serrata* appears to be restricted only at two sites i.e. at Mainpuri and Baraytha. At these sites, it showed a very poor density as compared to the other species found in the vegetation. No seedling and

saplings were found together with the trees. The status of *Boswellia serrata* in the vegetation appears to be decreasing due to its poor regeneration as evident from the absence of seedlings.

426. **Thakur, A.S. & Khare, P.K. 2007.** "Study of floristic diversity in forest vegetation of Sagar District, Madhya Pradesh". *J. Bot. Soc. Univ. Sagar* 42: 47–53. Abstract: Floristic diversity of vegetation was analysed in tropical dry deciduous forests occurring in Sagar district. A total number of 160 species of angiosperms were encountered during the sampling of vegetation. Out of these 73 species were of trees, 14 of shrubs, 65 of herbs, 11 of climbers and 2 of epiphytes. They belong to 54 families including 47 of dicotyledons and 7 of monocotyledons. Based on species contribution, Papilionaceae and Euphorbiaceae were found as dominant families. Generic coefficient at all the study sites varied from 80.80% to 89.55%. Generic coefficient as 81.25% was determined for total vegetation of Sagar district. On the basis of high percentage of generic coefficient, it can be inferred that more intergeneric competitions exist in the forests.
427. **Thakur, A.S. & Khare, P.K. 2008.** "Species diversity and composition of forest vegetation of Sagar district in central India". *Indian Forester* 134(6): 801–813. Abstract: Species composition and diversity of tree species were analysed in 10 representative forest sites occurring in Sagar district (Madhya Pradesh). As per values of IVI (Importance Value Index) six forest communities were identified. In general the forest vegetation of the district is either teak (*Tectona grandis*) dominating or teak associated. Species richness and species richness index ranged from 18 to 50 and 1.120 to 2.343 respectively. Shannon-Wiener diversity index ranged between 2.22-3.66 and Beta diversity ranged between 0.69-1.83. The values of concentration of dominance were generally low at all study sites indicating the dominance is shared by more than one and/or many species. Dominance-diversity curves showed long-normal distribution, also indicative of shared resources pattern by a number of species and mixed nature of vegetation.
428. **Thakur, A.S. & Khare, P.K. 2010.** "Vegetation changes during fifty years in the forest-complex of Patharia hills, Sagar, India". *Trop. Ecol.* 51(2): 161–171. Abstract: The present study was undertaken to compare the changing status of the forest vegetation of Patharia hills, which was earlier described by Misra & Joshi (1952). Topography, soil properties and extent of human disturbance are attributed as the major factors influencing the vegetation in Patharia hills. Different phytosociological attributes showed that at present *Acacia leucophloea*, *Diospyros melanoxylon* and *Butea monosperma* are the dominant species showing highest IVI values (25.49 to 32.29); while Misra and Joshi (1952) reported that *Anogeissus latifolia* and *Diospyros melanoxylon* were the dominant species during 1952 on the basis of high percentage frequency and dominance (cover). Most species of trees, shrubs and herbs showed contagious distribution and total composition of vegetation appears to be heterogeneous. During both the study periods common tree

species at different subsites ranged from 7 to 15 and the similarity index between 35.89 to 57.69%.

429. **Thomas, M., Sahu, P., Shrivastava, A. & Hussian, Z. 2011.** "Biodiversity and livelihood options of people in Chambal Ravine of Morena District, Madhya Pradesh, India". *J. Trop. Forest.* 27(4): 40–56. Abstract: Livelihood pattern of the people of an area is directly influenced by the local bio-diversity. Biodiversity is essential for human survival and economic well-being, and for the ecosystem function and stability. Over exploitation and bio-diversity loss affects livelihood and food security of the local. People change their livelihood strategies as an adaptive response to changes in their environment. Some livelihoods flourish while others diminish, and this ebb and flow is the result of a changing livelihood context. Ravine formation in the Piprai village of Morena District, India has resulted in the loss of agricultural land and shift in the livelihood pattern from crop based to animal husbandry. An increasing dependence of wild flora for food, fuel, fibre, medicine and trade is also effecting the bio-diversity in the village. Villagers have identified 60 floral and 27 faunal species of major economic importance.
430. **Thomas, M., Shrivastava, A., Hussian, Z. & Tomar, S.S. 2011.** "Declining trend of Guggul (*Commiphora wightii*) plants in Chambal Ravines of Morena district, Madhya Pradesh with special reference to Piprai village". *J. Trop. Forest.* 27(1): 57–61. Abstract: Guggul (*Commiphora wightii*) is an important arid medicinal plant species listed in the RET (Rare, Endangered and Threatened) category of plants, besides its ecological and medicinal importance, collection of Guggul gum constitutes an important economic activity of the people in Chambal ravines. An investigation was carried out in Piprai village of Morena district in Madhya Pradesh to explore the reasons for the rapid decline in the number of *C. wightii*. Villagers reasoned out five factors viz., destructive tapping, enrichment, termite infestation, soil erosion and damage by shepherd's forth rapid decline. On the basis of the present findings a conservation strategy can be formulated involving the primary stakeholders.
431. **Tiwari, A.P. 2012.** *Floristic diversity (Angiosperms) of Sidhi district, Madhya Pradesh.* Ph.D. Thesis, APS University, Rewa, Madhya Pradesh (unpublished).
432. **Tiwari, A.P. 2014.** Inventory of angiosperms taxa of Sidhi district, Madhya Pradesh". *J. Econ. Taxon. Bot.* 38(3-4): 395–440. Abstract: The present paper deals with an account of angiospermic taxa of Sidhi district, Madhya Pradesh. A total number of 941 species under 545 genera belonging to 132 families are recorded. Out of these 265 species in 139 genera and 26 families belong to monocot and 676 species in 406 genera and 106 families belong to dicot. A perusal of literature has indicated that 272 species collected from Sidhi district have not been recorded earlier from the district.
433. **Tiwari, A.P. & Khanna, K.K. 2014.** "Floristic analysis (angiosperms) and economically important plants of Sidhi district, Madhya Pradesh, India". *Bionature* 34(2): 47–57.

Abstract: The present paper deals with the floristic analysis of angiosperms and economic plants occurring in Sidhi district, Madhya Pradesh (India). A total number of 941 species under 545 genera belonging to 132 families have been recorded. Out of these 265 species in 139 genera and 26 families belong to Monocot and 676 species in 406 genera and 106 families belong to Dicot. Poaceae is the largest family (135 species) while *Cyperus* and *Eragrostis* are dominant genera (14 species each). The details of analysis along with rare, threatened and economic plants have been provided in the paper.

434. **Tiwari, A.P. & Khanna, K.K. 2014.** "Inventory of angiospermic taxa of Sidhi district, Madhya Pradesh". *J. Econ. Taxon. Bot.* 38(3&4): 395–440. Abstract: The present study reveals that 941 species of angiosperms under 545 genera belonging to 132 families are found in Sidhi district, Madhya Pradesh. Out of these 265 species under 139 genera and 26 families belongs to monocot and 676 species in 406 genera and 106 families belongs to dicots.
435. **Tiwari, A.P., Khanna, K.K. & Dubey, P.C. 2015.** "Angiospermic diversity of Gandhisagar Wildlife Sanctuary, Madhya Pradesh, India". *Geophytology* 45(2): 139–151. Abstract: A list of angiospermic plants occurring in Gandhi Sagar Wildlife Sanctuary has been presented in the paper. Extensive collections were made in the area during different seasons from 2013 to 2014, and their subsequent identifications have revealed the occurrence of 502 species of angiosperms under 321 genera and 85 families in the sanctuary. Enumeration of each species along with the details of analysis of status of families, genera and species, dominant families, dominant genera, life forms and rare plants have been provided in the paper.
436. **Tiwari, A.P., Sikarwar, R.L.S. & Shujaiddin, N. 2016.** "A conspectus of flowering plants: Guru Ghasidas National Park, Koriya, Chhattisgarh". *J. Econ. Taxon. Bot.* 38(3-4): 463–511. Abstract: The present paper deals with preliminary account of the flowering plants of the Guru Ghasidas National Park, Koriya, Chhattisgarh. The vegetation of the area is tropical dry deciduous and tropical moist deciduous. Floristic surveys were carried out during 2008-2009 in different ecosystems of the park. During the survey, 602 species of flowering plants belonging to 386 genera and 98 families were recorded. Out of these, 437 species under 282 genera and 78 families belong to dicots and the remaining 165 species under 104 genera and 20 families are monocots. Poaceae is the largest family (74 species) while *Cyperus* and *Ficus* are dominant genera (10 species each). The details of analysis of rare plants have been provided in the paper.
437. **Tiwari, A.P., Dubey, P.C., Sikarwar, R.L.S. & Khanna, K.K. 2017.** "Vascular plants of Kshipra river banks and its tributaries, Madhya Pradesh, India". *Indian Forester* 143(5): 451–458. Abstract: The present study of the vascular plants of Kshipra river bank and its tributaries was carried out from 2014 to 2016. A total of 327 species under 241

genera belonging to 75 families of vascular plants were recorded. Out of these, 324 species are angiosperms belonging to 238 genera and 72 families, 3 species are pteridophytes belonging to 3 genera and 3 families. In angiosperms, dicotyledons comprised of 243 species under 178 genera and 60 families and the monocotyledons comprised of 81 species belonging to 60 genera and 12 families. Poaceae is the largest family (41 species) while *Cyperus*, *Euphorbia*, *Ficus*, *Indigofera* and *Ipomoea* are dominant genera (5 species each). The details of analysis of habit, status of plants and economic importance have been provided in the paper.

438. **Tiwari, D.K. 1951-1952.** "An ecological survey of natural grasslands of Sagar with special reference to grass-legume association". *Bull. Bot. Soc. Univ. Saugar* 1&2: 5-9. Abstract: The present deals with a detailed survey of various types of grasslands to assess the phytosociological characteristics of the meadow vegetation and of grass-legume association under various natural and artificial conditions and the multitude of environmental factors viz., climatic, edaphic, biotic and physiographic. Eight representative types of grasslands were studied each of which provided data on the floristic composition, total coverage, abundance, dominance, frequency, sociability, vitality.
439. **Tiwari, D.K. 1960.** "Hydrophytes of Raipur-I. Aquatic vegetation". *Proc. 47<sup>th</sup> Indian Sci. Congr.* 3: 407.
440. **Tiwari, D.K. 1960.** "Hydrophytes of Raipur-II. Marshy vegetation". *Proc. 47<sup>th</sup> Indian Sci. Congr.* 3: 407-408.
441. **Tiwari, J.P. 1981.** "The major winter weeds in Sagar division of Madhya Pradesh". *Indian J. Weed Sci.* 14(1): 37-42.
442. **Tiwari, S. & Bansal, S. 1994.** "Air pollution tolerance indices of some planted trees in urban areas of Bhopal". *Acta Ecol.* 16(1): 1-8. Abstract: In the present investigation, Air Pollution Tolerance Index values of twenty five species growing in various localities of Bhopal were calculated based on the formula evolved by Singh and Rao (1983). With the help of parameters like total chlorophyll, leaf extract pH, ascorbic acid and relative water content APTI was determined. Air Pollution Tolerance level of each plant was different and plants did not showed a uniform behaviour. Plants having higher APTI value are more tolerant to air pollution than those having lower APTI values. Species having low APTI value may act as bio-indicators of pollution. Such species should be planted to monitor the air pollution level in the ambient air.
443. **Tiwari, S.D.N. 1954-1955.** "The grasses of Madhya Pradesh". *Indian Forester* 80: 601-611, 681-689; 81: 107-115, 191-200. Abstract: In this paper a general description has been given of 201 grasses collected from Mandla, Chanda, Bastar, and a few other districts of Madhya Pradesh along with their ecology and economic importance.
444. **Tiwari, S.D.N. 1963.** "Supplement to the grasses of Madhya Pradesh". *Indian Forester* 89: 593-602. Abstract: The author had published description of 201 species of grasses

collected from old Madhya Pradesh region in Indian Forester, October and November, 1954 and February and March, 1955. In this supplement, description of additional 38 species and 7 genera is added.

445. **Tiwari, S.D.N. 1968.** "Flora of Bandhavagarh". *Indian Forester* 94: 571–584. Abstract: This paper deals with flora of Bandhavagarh which has been collected during 3 different periods of a year. The total list of plants found in this locality and included in this paper is 553 belonging to 362 genera and 94 families. Bandhavagarh is entirely a new locality for exploration of flora and it should prove an important landmark to botanists.
446. **Tiwari, S.D.N. 1972.** "Flora of Bansapur". *Botanique* 3: 73–84.
447. **Tiwari, S.D.N. 1979.** *The phytogeography of legumes of Madhya Pradesh (Central India)*. Bishen Singh Mahendra Pal Singh, Dehra Dun.
448. **Tiwari, S.D.N. & Maheshwari, J.K. 1963.** "The orchids of Madhya Pradesh". *Indian Forester* 89: 426–444. Abstract: The paper deals with an enumeration of the orchid flora of Madhya Pradesh. Orchids are well known foreign exchange earners and form the basis of a horticultural industry. A total number of 60 species of orchids belonging to the genera *Acanthophippium*, *Acampe*, *Aerides*, *Ascocentrum*, *Bulbophyllum*, *Cleisostoma*, *Cymbidium*, *Dendrobium*, *Epipogon*, *Eria*, *Eulophia*, *Geodorum*, *Goodyera*, *Habenaria*, *Liparis*, *Luisia*, *Malaxis*, *Oberonia*, *Pachystoma*, *Peristylis*, *Pholidota*, *Platanthera*, *Thunia*, *Tropidia*, *Vanda* and *Zeuxine*, is described in this paper. An annotated list of the most ornamental orchids is given in the appendix with notes on their habitat and culture.
449. **Tiwari, S.D.N. & Maheshwari, J.K. 1964.** "The Cyperaceae of Madhya Pradesh. Part. I & II". *Indian Forester* 90: 147–149, 616–629. Abstract: The paper deals with an enumeration of the sedge flora of Madhya Pradesh. The use of sedges as material for phytogeographical studies of the flora of India could be rewarding. Further, distributional studies of sedges provide material of great value for such topics as endemism, patterns of distribution, centres of dispersal, affinities, etc.
450. **Tiwari, S.D.N. & Maheshwari, J.K. 1965.** "The Commelinaceae of Madhya Pradesh". *Indian Forester* 91: 580–590. Abstract: The paper deals with an enumeration of the spiderworts of Madhya Pradesh. A total number of 26 species belonging to the genera *Commelina* L., *Cyanotis* D. Don *nom. cons.*, *Floscopa* Lour., *Murdannia* Royle *nom. cons.*, *Rhoeo* Hance and *Zebrina* Schnizl, is described in this paper.
451. **Tiwari, V.K., Masih, S.K. & Sahu, K.P. 2015.** "Plant diversity in forested corridor connecting Kanha and Achanakmar protected areas". *J. Trop. Forest.* 31(1): 20–45. Abstract: The proposed corridor area connects Kanha and Achanakmar wild life protected areas in Madhya Pradesh and Chhattishgarh states. It is spread over two states and three districts covering an approximate area of 600 km<sup>2</sup>, out of which about 40% area lies in Bilaspur district of Chhattishgarh state and the remaining 60% area is under

Mandla and Dindori districts of Madhya Pradesh. On the basis of detailed floristic survey carried out from 2009 to 2013, a total of 330 species belonging to 227 genera and 73 families were catalogued. Floristic composition (Biological spectrum) is comprised of 85 (25.64%) tree, 58 (18.59%) shrub, 82 (25.0%) herb, 78 (24.0%) grasses and 27 (8.00%) species of climbers, respectively. Out of total 73 families, 59 families belong to Dicots, 13 families to Monocot groups and one family to Pteridophytes. Aquatic ecosystems in the proposed areas comprise of 50 aquatic species belonging to 29 families.

452. **Tomar, Sangeeta & Sikarwar, R.L.S. 2013.** "General economic loss caused by Rhesus Monkeys (*Macaca mulatta* ssp. *mulatta*) in Chitrakoot Region". *Natl. J. Life Sci.* 10(2): 159–163.
453. **Tripathi, A.K. 1988.** "A taxonomic study of Aizoaceae and Molluginaceae of Madhya Pradesh". *Proc. Natl. Acad. Sci. India* 58: 431–436.
454. **Tripathi, A.K. 1988.** "A taxonomic study of Onagraceae of Madhya Pradesh". *Res. J. Pl. Environm.* 4: 9–16.
455. **Tripathi, J.P. & Bajpai, S.P. 1982.** "A phytosociological study of *Anogeissus pendula* (Edgew.) type of forests of Bundelkhand region I". *Bull. Bot. Soc. Univ. Saugar* 29: 37–44. Abstract: The present paper deals with the phytosociological study of *Anogeissus pendula* type of forests of Bundelkhand region. The study has been made in two selected sites of Sagar and Tikamgarh districts, which were dissimilar in topography and geobiology. The two forests of different habitats were dissimilar in their vegetation composition. The average density of tree species/hectare was seven times in Chandpura in comparison to Ramna forest. The density of *A. pendula* was highest at slopes on both sites.
456. **Tripathi, R.P. & Mishra, S.N. 2002.** "Megaspores from the coal deposits of South Rewa Gondwana Basin". *Indian Fern J.* 19: 82–88. Abstract: The newly described megaspore taxa, *Jamunatriletes punctatus* gen. et sp. nov. and *Palispora granulosus* gen. et sp. nov., are reported from Jamuna and Birsingh Pvt. Pali coalfields of South Rewa Gondwana Basin. The genus *Jamunatriletes* is characterised by its punctuate sexine and unpitted nexine while the *Palispora* possesses exclusively granulate sexine and pitted nexine. The poromorphs were studied under SEM and light microscope in dry and wet conditions.
457. **Trivedi, B.S. & Srivastava, R. 1982.** "*Aesculoxylon deccanensis* gen et sp. nov. from Mohgaonkalan, Chhindwara district (M.P.)". *J. Indian Bot. Soc.* 61: 426–431. Abstract: The paper describes anatomical details of a fossil dicotyledonous wood under the name *Aesculoxylon deccanensis* gen et sp. nov. from Deccan Intertrappean beds of Mohgaonkalan, Chhindwara district, Madhya Pradesh. The wood is similar to that of modern *Aesculus* L.

458. **Tuteja, S.C. & Singh, V. 1980.** "The botany of Dheopur Forest Division, Madhya Pradesh-I. Geology and Forest types". *Indian J. Forest.* 3(1): 9-14.
459. **Unni, K.S. 1967.** "Studies on the vegetation of ponds, swamps and river-banks in Raipur, M.P.". *J. Bombay Nat. Hist. Soc.* 64: 95-102.
460. **Unni, K.S. 1967.** "Compositae of Raipur and surroundings". *J. Bombay Nat. Hist. Soc.* 64: 333-338.
461. **Urmaila, R. & Bansal, S. 2014.** "Soil status under Teak plantations of Umaria district". *J. Trop. Forest.* 30(2): 8-11. Abstract: The present study conducted under teak plantations of different ages raised by Madhya Pradesh Rajya Van Vikas Nigam Ltd. in Umaria District, revealed that the available Electrical Conductivity (EC) and macronutrient (P, N and Co) contents of soil were found increasing with plantation age. However, water holding capacity of soil under plantations has a decreasing trend and hydrogen ion concentration (pH) was found to be slightly acidic in nature. All above mentioned findings reflect self-managing nature of teak plantation, according to its requirements with progressive age.
462. **Verma, D.M. 1977.** "A perspective on the floristic studies in the south-eastern corner of Madhya Pradesh and future needs". *Bull. Bot. Surv. India* 19(1-4): 89-94. Abstract: Pre-independence and post-independence floristic studies and floristic publications in south-eastern corner of Madhya Pradesh have been discussed in the present paper.
463. **Verma, D.M. & Chandra, V. 1981.** "Cyperaceae of Madhya Pradesh". *Rec. Bot. Surv. India* 21(2): 221-275.
464. **Verma, D.M. & Hanfi, M.I. 1988.** "Conspectus of the family Malvaceae of Madhya Pradesh". *J. Econ. Taxon. Bot.* 12(1): 211-223. Abstract: Family Malvaceae in Madhya Pradesh is represented by 40 species belonging to 13 genera. The paper includes keys to their identification, correct botanical names, short descriptions, distribution, miscellaneous notes and phytogeographical analysis.
465. **Verma, D.M. & Srivastava, R.C. 2008.** "Notes on distribution of sedges in Chhattisgarh and Madhya Pradesh states of India". *J. Trop. Forest.* 24(3&4): 65-68. Abstract: The paper throws light on diversity of the sedge family (Cyperaceae) in Madhya Pradesh and Chhattisgarh states of Indian Union. The family is represented by 98 species belonging to 10 genera in Chhattisgarh state and by 104 species under 11 genera in Madhya Pradesh as per present exploration records.
466. **Verma, D.M., Balakrishnan, N.P. & Dixit, R.D. 1993.** *Flora of Madhya Pradesh*. Vol. I. Pteridophytes and Angiosperms (Ranunculaceae to Plumbaginaceae). Botanical survey of India, Calcutta. Abstract: The flora deals with an account of 102 species of pteridophytes belonging to 51 genera and 36 families and 874 species of angiosperms belonging to 407 genera and 83 families (Ranunculaceae to Plumbaginaceae).



467. **Verma, D.M., Pant, P.C. & Hanfi, M.I. 1985.** *Flora of Raipur, Durg and Rajnandgaon*. Botanical Survey of India, Howrah. Abstract: The flora deals with 1032 species belonging to 568 genera and 127 families of flowering plants. Out of these, 287 species in 136 genera and 25 families belongs to monocots and 745 species in 432 genera and 102 families belongs to dicots.
468. **Verma, K.S. & Dahake, D. 2005.** "Taxonomic study of the unisexuals of Jabalpur (M.P.)". *J. Bot. Soc. Univ. Sagar* 40: 51–62. Abstract: Present paper deals with the plant taxonomic studies in Jabalpur. Unisexuals are represented by six families - Euphorbiaceae, Ulmaceae, Urticaceae, Moraceae, Casuarinaceae & Ceratophyllaceae. Euphorbiaceae with 46 species is first dominant, Moraceae has got second dominant position with 12 species whereas Urticaceae represent by 3 species and remaining three are by only single species.
469. **Verma, K.S., Khan, T., Awasthi, A. & Charmkar, S.P. 2012.** "Assessment of indigenous floristic diversity of east zone of Jabalpur (M.P.)". *J. Trop. Forest.* 28(4): 60–63. Abstract: Floristic composition of any place is essential requirement for the study of various ecosystems. Rich floristic diversity depends on suitable climatic and soil condition of particular area. In recent years most plants are becoming extinct due to over exploitation, over grazing and global warming. The present paper deals with 44 plant species belonging to 29 families and 43 genera which possess medicinal properties and are used to treat several diseases by local traditional healers in 4 wards of Jabalpur city.
470. **Verma, R. & Das, R.R. 1982.** "Ecological studies on the forests of Kolaras range". *Indian J. Forest.* 4(2): 123–128. Abstract: The paper deals with the vegetation of Kolaras range, distt. Shivpuri (M.P.). There are well defined 27 aspects on which 35 tree and shrub species have been recorded. Within a small area presence of 18 distinct communities clearly indicates the potency of environmental factors in providing large numbers of local environmental complexes which hold a specific community. It also suggests that how human interferences together with the topography of the land can produce a large variety of environmental complexes. Various communities have been compared by evaluating the similarity indices.
471. **Verma, Rajani & Das, R.R. 1982.** "Floristic composition of the Kolaras range, Distt. Shivpuri, Madhya Pradesh". *J. Econ. Taxon. Bot.* 3: 751–771. Abstract: The present investigation, conducted during 1975 and 1976, revealed that 179 species belonging to 137 genera and 46 families occur at Kolaras Range of district Shivpuri (M.P.). The ratio of monocots and dicots is 1:2.9. Fabaceae tops the list of ten dominant families.
472. **Verma, R.K., Kumar, V. & Gupta, S.R. 2007.** "Reproductive phenology of tree species in a mixed dry deciduous forest of Orchha, Madhya Pradesh". *J. Trop. Forest.* 23(1&2): 47–55. Abstract: Reproductive phenology of sixteen woody species was observed from July to June 1999. The tree species of Orchha forest stand exhibited four, flowering &

fruiting types and three fruit fall types. Leaf phenophases had three kinds of relationship with flowering and fruiting. Among the months the peak flowering was observed in May when out of sixteen, five species flowered while, no flowering was recorded during November, December and January. The fruiting in Orchha was take place throughout the year although it peak is October-November when 50 per cent species bore fruits.

473. **Verma, R.K., Kumar, V., Agarwal, R.K. & Gupta, S.R. 2007.** "Diversity of leaf phenology of tree species in a mixed dry deciduous forest of Orchha, Madhya Pradesh". *Ann. Forest.* 15(2): 207–219. Abstract: Diversity of leaf phenology of sixteen tree species in a mixed dry deciduous forest of Orchha (M.P.) was observed from July 1998 to June 1999. Two major leaf fall periods were recognised viz., winter period and summer period. The maximum leaf fall was observed during October to Fenruary (79.25%) while comparatively less leaf fall during March to April (20.75%). Among the months the peak leaf fall was observed in January-February when more than 85 per cent tree species fell their leaves. In this forest stand leafing activity took place between March and June with a peak in May when more than 90 per cent trees leaves out pre-monsoon flush. The leaf phenophases had three kinds of relationship with flowering.
474. **Verma, R.K., Khatri, P.K., Kunhikannan, C., Verma, R.K. & Totey, N.G. 1998.** "Advantageous effects of the tree plantation on the rehabilitation of Bhata land ecosystem". *Indian J. Forest.* 21(3): 197–203. Abstract: Bhata soils cover a vast area of the order of 3,69,850 hectares in Chhatisgarh basin and 90,950 hectares in Bilaspur district of Madhya Pradesh (India). They are alsmot barren except a few patches of plantations raised on experimental basis to know the growth performance of different forest species. The present investigation in Bhata soils near Mohan Bhata area (Bilaspur) deals with the changes taken place in ground flora, soil physic-chemical properties, soil micro-flora and fauna due to plantatiojn of different tree species. *Desmodium triflorum* is the dominant herbaceous species under *Embllica officinalis* and *Tamarindus indica* plantations with maximum density, frequency and abundance. In general, distribution of all ground flora species is contagious. Index of dominance is lower and index of diversity is higher for ground flora under these plantations as compared to control (open treeless Bhata land). The index of dissimilarity between plantations and control is high. The population of bacteria, fungi, nematodes and vesicular-arbuscular mycorrhizal (VAM) fungi was more in plantations than that in the control area. The fertility status of soil under plantations is higher.
475. **Verma, R.K., Varghese, M., Kunhikannan, C., Khatri, P.K., & Totey, N.G. 1998.** "Vegetational diversity of Dalal swamp, Seoni, Madhya Pradesh". *Indian J. Trop. Biodiv.* 1(3&4): 242–248. Abstract: The present investigation deals with the vegetational diversity in Dalal swamp. The vegetation is heterogenous and covers swamp proper and surrounding area. The different communities such as *Cyperus-Lymnophylla*, *Ageratum-Colocasia*,

*Aeratum-Lymnophylla-Fern iand Syzygium-Terminalia have been described. Many of these species such as Cyperus sp., Aegeratum conyzoides are of high medicinal value and are wild relatives of cultivated crops like Colocasia.*

476. **Vinaygam, Senthil, Dupare, B.U. & Joshi, O.P. 2006.** "Traditional technologies in soybean cultivation in Madhya Pradesh". *Indian J. Tradit. Knowl.* 5(1): 25–33. Abstract: This paper reports the age-old technologies followed by soybean growers in Madhya Pradesh. Madhya Pradesh contributes about 67 & 56% in total area and production of soybean, respectively in the country. Soybean is known to Indians since ages as food plant and was in cultivation in hills of Kumaon and Garhwal region of Uttaranchal state, foothills of Himalayan and scattered pockets of central India. Historical records, however, reveals that small seeded black soybean was in cultivation in central province, somewhere in 1882 at Nagpur. Soybean was introduced at Adhartal farm (Jabalpur) during 1935-36 and in 1937-38 at Hoshangabad district in Madhya Pradesh. Since then the soybean is being grown in the farmers field. The farmers practice a large number of production technologies developed by different research organization. Added to this, 34 traditional practices followed by soybean growers in Madhya Pradesh have been reported in many secondary sources of data collection. Traditional technologies adopted by 100 farmers of Indore, Dewas and Jhabua districts of Madhya Pradesh have been documented in the present work. Of these, 16 traditional technologies or practices are being practiced by more than one third of total respondents. Small and marginal farmers, in spite of introduction of improved technologies, commonly resort to few traditional technologies. This calls for renewed thrust to disseminate the blend of effective, cheap and eco-friendly indigenous traditional practices with modern technologies in agriculture to provide sustainability to their fragmented holdings.
477. **Viswanath, S., Kaushik, P.K., Pandey, D.K. & Sahai, A. 1998.** "Effect of *Acacia nilotica* (L.) Willd. ex Del. on rainfed rice crop in Chhattisgarh, Madhya Pradesh". *Ann. Forest.* 6(1): 103–109. Abstract: Among the various traditional agroforestry modes in Chhattisgarh, maintaining *Acacia nilotica* (Babul) trees as scattered trees inside crop fields at high densities (100-125 trees/ha) on a 10-12 year rotation is very popular. The effect of Babul trees on associated rice crop growth, yield and soil physic-chemical properties was monitored in the field plots located in Bilaspur district during 1993-1994 periods. The observations indicate that crop parameters extent of 28-30% immediately below canopy of trees and gradually increased away from spread of crwon. The O.M. % and available 'N' was significantly affected by tree growth and recorded 48% and 16% higher than control plots. The Leaf Area Index (LAI) values recorded for Babul trees in the experimental plots ranged from 0.98 to 1.83 and was negatively correlated to light available below canopy. Timely root and crown pruning was well as thinning practices are suggested to ensure higher crop yields.

478. **Wadhwa, B.M. 1960.** "Studies on the vegetation of Raigarh district of Madhya Pradesh". *Bull. Int. Soc. Trop. Ecol.* 1: 37.
479. **Wadhwa, B.M. 1960.** "Distributional pattern of some plants of Central India". *Mem. Indian Bot. Soc.* 3: 13–16.
480. **Wagh V.V. & Jain, A.K. 2013.** "Floristic diversity of Jhabua district, Madhya Pradesh, India". *Academic J. Pl. Sci.* 6(4): 146–167. Abstract: The present study was carried out in Jhabua district, situated in the western most part of Madhya Pradesh. The present study shows that 692 species of angiosperms under 469 genera belonging to 115 families are found in Jhabua district. Out of these 150 species in 102 genera and 20 families belongs to Monocot and 542 species in 367 genera and 95 families belongs to Dicot. The tribal of the district are totally depends on the forest resources for their livelihood. Due to some natural and manmade factors several species are struggling for their existence, proper conservation and management plans are needed to save the natural resources especially medicinal and dwindling plant species of the district.
481. **Wagh V.V. & Jain, A.K. 2015.** "Invasive alien flora of Jhabua district, Madhya Pradesh, India". *Int. J. Biodiv. Cons.* 7(4): 227–237. Abstract: The present study deals with comprehensive list and status of invasive plant species in Jhabua district of Madhya Pradesh along with their life form, nativity, uses, habitat, categories and mode of introduction. A total of 102 invasive alien plant species belonging to 80 genera under 39 families were recorded from the study area. The analysis of invasive species reveals that 16 species have been introduced intentionally, while the remaining species established were unintentionally through trade. Sixty four aliens have their origin in Tropical America as compared to 14 species in African continent. About 23 species of alien plants reached the study area from such far off places. A better planning is needed for early detection to control and report infestation of spread of new and naturalised weed to be monitored.
482. **Wani, M.A. & Saify, T. 2013.** "Preliminary survey of flora of Bhopal (M.P.), India; collection and digital imaging". *Indian J. Appl. Pure Biol.* 28(2): 303–310. Abstract: The study was carried out in different parts of Bhopal and 106 plants were identified and collected during the flowering, fruiting and seed developing stages. These plants were classified into three categories: - 1. Trees 2. Shrubs and 3. Herbs and described in relation to their botanical name, family, genus, and species. Out of the 106 plant species, 74 were trees belong to 36 families, 19 were shrubs belong to 13 families and 12 were herbs and grasses belong to 6 families. This study shows great variation in the flora of Bhopal (M.P). Most plant pigments are not stable as herbarium vouchers. Hence the photograph of each plant was captured and attached with specimen. These photographs, combined with herbarium vouchers are critical to the process of verifying the authenticity of the plants.

483. **Williams, A.J., Gupta, B.N. & Banerjee, S.K. 1996.** "Effect of thermal power plant emissions on vegetation". *Indian J. Forest.* 19(4): 330–334. Abstract: The extent of pollution due to thermal power plant emissions and the response of vegetation to pollutants in and around Korba (M.P.) Industrial complex was studied. Dust fall, concentrations of suspended particulate matter, sulphur dioxide, nitrogen oxides, etc. exceed air quality standard causing metabolic disruption of plants and the symptoms like necrosis, chlorosis, tipburn, etc. are noticeable. Depending upon the tolerance to pollutants, some species have been selected for large scale plantation for mitigating the adverse effects.
484. **Witt, D.O. 1908.** *List of trees, shrubs, climbers and other plants of economic importance found in the Berar forest circle of the Central Provinces.* Govt. Press, Nagpur.
485. **Wood, J.J. 1902.** "Plants of Chhota Nagpur including Jashpur and Surguja". *Rec. Bot. Surv. India* 2 (1): 1–170.

#### **Fungi, Lichens and Algae and other non-flowering plant groups and Gymnosperms**

486. **Adoni, A.D. & Seth, L.B. 1973.** "Some interesting Vaucheriaceae of Sagar (M.P.) India". *Bull. Bot. Soc. Univ. Saugar* 20(1 & 2): 39–42. Abstract: In the present article eight species have been described from Sagar. One species of *Dichotomosiphon* viz. *Dichotomosiphon tuberosus* and seven species of *Vaucheria* viz., *V. polysperma*, *V. bilateralis*, *V. sessilis*, *V. geminata* var. *verticillata*, *V. hamata*, *V. debaryana* and *V. jaoi* were collected during 1973–74. One variety *V. geminata* var. *verticillata* and two species i.e. *V. debaryana* and *V. jaoi* are new records for this country. It was also seen that a parasitic aquatic fungus *Woronina* infected two spp. of *Vaucheria*.
487. **Agarkar, M.S. 1969.** "Contribution to the Desmids of Gwalior, Madhya Pradesh". *Phykos* 8: 1–10.
488. **Agarkar, M.S. 1972.** "Contribution to the Desmids of Madhya Pradesh". *Acta Biol.* 12: 159–178.
489. **Agarkar, M.S. & Agarkar, D.S. 1972.** "Zygnemataceae of Madhya Pradesh". *Phykos* 4: 71–77.
490. **Agarkar, M.S., Agarkar, D.S. & Banerjee, S. 1983.** "Desmids of Jabalpur of Madhya Pradesh". *Biblioth. Phycol.* 6: 333–370.
491. **Agarkar, M.S., Rajak, R.K., Gautam, S.P. & Thakur, M.K. 1983.** "*Ecballocystis courtallensis* Iyengar— A new record from Pachmarhi, Madhya Pradesh (India)". *J. Econ. Taxon. Bot.* 4: 311–312. Abstract: During the course of excursion of Pachmarhi (October 1978–1979) an alga *Ecballocystis courtallensis* Iyengar was collected. It is a rare find and new record for Madhya Pradesh.
492. **Agarwal, G.P. 1961.** "Fungi causing plant diseases at Jabalpur (Madhya Pradesh) –

- III". *J. Indian Bot. Soc.* 40: 404–408. Abstract: The present paper describes five parasitic Fungi Imperfecti occurring at Jabalpur. It includes *Aletrnaria tenuis* auct. On leaves of *Xanthium strumarium* L., *Ipomoea reptans* Poir., *Pisum sativum* L. and *Momordica dioica* Roxb., the four new host records for *Alternaria tenuis*; *Corynespora casiicola* (Berk. and Curt.) Wei causing leaf-spot of of *Hiptage benghalensis* Kurz., a new host record; *Pestalotiopsis fici* Steyaert on leaves of *Ficus religiosa* L., a new fungus record for India; *Gloeosporium artocarp* Delacr. on leaves of *Artocarpus integrifolia* L., a nw record for the state and *Phyllosticta tephrosiae* Agarwal, a new species on leaves of *Tephrosia purpurea* Pers.
493. **Agarwal, G.P. & Beliram, R. 1960.** "Fungi causing plant diseases at Jabalpur (Madhya Pradesh) – II". *J. Indian Bot. Soc.* 39: 351–356. Abstract: The present paper describes five parasitic fungi imperfecti occurring at Jabalpur. It includes, *Biharia smilacis*, a new species, on *Smilax macrophylla*, *Septoria socia* on *Chrysanthemum* sp., *Colletotrichum pithecolobii* on *Pithecolobium dulce*, *Cercospora riachueli* on *Vitis trifolia*, new fungus records for India and *Curvularia lunata* on *Musa paradisiacal* and *Cymbopogon citrates*, new host records.
494. **Agarwal, G.P. & Gupta, S. 1988.** "Some new saprophytic ascomycetes from Jabalpur (M.P.)". *Proc. Natl. Acad. Sci. India* 58: 341–342.
495. **Agarwal, G.P., Gupta, S. & Pandey, A.K. 1993.** "Saprophytic fungi from Jabalpur: New additions". *J. Econ. Taxon. Bot.* 17(1): 79–87. Abstract: During an extensive mycological survey in and around Jabalpur, fourteen fungi, viz., *Acrodictys globulosa*, *Endophragmiella novae-zealandiae*, *Helicoma dennisii*, *Monodictys asperosporum*, *Sporidesmium leonense*, *S. cookie*, *S. inflatum*, *Taeniolella maricata*, *Ulocladium atrum*, *Cytospora ipomoeae*, *Botryosphaeria subglobosa*, *Hysteroglyphium mori*, *H. dalbergiae* and *Tubeufia yasudae* has been collected. These are new addition to the Indian mycoflora.
496. **Agarwal, G.P., Gupta, S. & Pandey, A.K. 1994.** "Saprophytic fungi from Jabalpur: New host records". *J. Econ. Taxon. Bot.* 18(2): 307–314. Abstract: The paper includes fifty seven fungi collected from Jabalpur and its shrubs, which constitutes new hosts for the respective fungi from India.
497. **Agarwal, G.P., Hasija, S.K., Agrawal, P. & Pandey, A.K. 1992.** "Seasonal occurrence of aquatic hyphomycetes in different aquatic habitats at Jabalpur". *J. Indian Bot. Soc.* 71: 95–97. Abstract: Mycological survey of nine water bodies at Jabalpur for aquatic hyphomycetes, revealed eighteen fungal species isolated using leaf, twigs and foam analysis. Maximum numbers of fungi were recorded in case of leaf litter. Winter, early summer and late monsoon were the most suitable periods for the sporulation of most of these fungi. Out of the nine water bodies Pariyat yielded maximum fungi. *Lunulospora curvula* and *Beltrania rhombic* were the most dominant fungal species.

498. **Bajpai, R., Nayaka, S. & Upreti, D.K. 2017.** "Extended distribution of lichen genera *Heiomasia* and *Herpothallon* in India". *Phytotaxonomy* 17: 31–38. Abstract: Extended distribution of seven species of *Herpothallon* viz., *H. echinatum*, *H. granulare*, *H. granulatum*, *H. isidiatum*, *H. minutum*, *H. philippinum* and *H. stricticum* are provided. Earlier these species were known from limited localities in parts of north-east India, coastal West Bengal or Andaman Islands and currently they are also recorded from S. India, especially Western Ghats, Madhya Pradesh and Uttarakhand. Present study is based on observation of large number of specimens annotated as 'sterile specimen' and preserved at CSIR-National Botanical Research Institute herbarium (LWG). An updated key to the 45 species of *Herpothallon* and three species of *Heiomasia*, so far known from the world is also provided.
499. **Bandhe, P.D. 1976.** "The Lichen flora of Panchmarhi – I". *Bull. Bot. Surv. India* 18(1-4): 172–177. Abstract: The lichen flora of India has only been partially investigated. A perusal of the literature on Indian lichen has revealed that the lichen flora of Panchmarhi (Madhya Pradesh) has remained totally unexplored. The present paper gives an account of the taxonomic investigations carried out by the author on the forest areas of Panchmarhi, which includes 5 species viz. *Graphina pertriosa*, *G. junghuhnii*, *Parmeli cooperii*, *P. tinctorum*, *Leptotrema wightii*, and the former two are new reported from India.
500. **Bansal, P. & Nath, V. 2016.** "Current status of the genus *Bryum* Hedw. in central India". *Indian Forester* 142(6): 590–594. Abstract: *Bryum* Hedw. is represented in central India by fourteen species. Of these, *B. Pseudotriquetrum* (Hedw.) P. Gaertn., B. Mey. et Scherb., reported from Amarkantak (Madhya Pradesh) and *B. Pseudotriquetrum* var. *subrotundum* (Brid.) Gangulee from Mount Abu (Rajasthan) are new record for central Indian Bryoflora.
501. **Bir, S.S. & Vasudeva, S.M. 1972.** "Ecological and phytogeographical observations on the pteridophytic flora of Panchmarhi hills, central India". *J. Indian Bot. Soc.* 51: 297–304.
502. **Bir, S.S. & Vasudeva, S.M. 1973.** "Systematic account of pteridophytes of Panchmarhi hills, central India". *Pl. Sci.* 5: 71–86.
503. **Bisen, Pratima & Tiwari, Shashi. 2015.** "A review on keratinophilic fungi of Madhya Pradesh". *IOSR J. Pharma. & Biol. Sci.* 10(6): 18–22. Abstract: In graphically, Madhya Pradesh located in plains between latitude 21°04'N-26.87°N and longitude 74°02'-82°49' E. It's Western and North-Western region receive 1000 mm [39.4 inch] or less and Eastern & South- Eastern region receive as much as 2,150 mm [84.6 inch] or more rainfall in monsoon season and temperature has Min 15°C to 18°C in January and Max 40°C to 45°C or more in June. These climatic conditions of M.P. are favorable for fungal growth. Keratinophilic fungi are the specialized group of fungi which are able to attack

keratinized tissues. These are basically saprophytes but occasionally becomes potentially pathogenic to man and animals and known as dermatophytes. In M.P. studies of keratinophilic fungi are not well pronounced but some good works had done by different workers in this arena. *Chyso sporium indicum*, *Chyso sporium spp.*, *Micro sporium gypsum*, *Trycho phyton mentagrophytes*, *Malbranchea sp.*, *Anixiopsis sp.*, *Arthoderma benhiman*, *Keratinophyton sp.* are some common keratinophilic fungi reported from soil of Madhya Pradesh

504. **Bisen, Pratima & Tiwari, Shashi. 2015.** "A review on keratinophilic fungi of Madhya Pradesh". *IOSR J. Pharma. & Biol. Sci.* 10(6): 18–22. Abstract: In graphically, Madhya Pradesh located in plains between latitude 21°04' – 26.87°N and longitude 74°02' – 82°49' E. It's Western and North-Western region receive 1000 mm [39.4 inch] or less and Eastern & South- Eastern region receive as much as 2,150 mm [84.6 inch] or more rainfall in mansoon season and temperature has Min 15°C to 18°C in January and Max 40oC to 45°C or more in June. These climatic conditions of M.P. are favorable for fungal growth. Keratinophilic fungi are the specialized group of fungi which are able to attack keratinized tissues. These are basically saprophytes but occasionally becomes potentially pathogenic to man and animals and known as dermatophytes. In M.P. studies of keratinophilic fungi are not well pronounced but some good works had done by different workers in this arena. *Chyso sporium indicum*, *Chyso sporium spp.*, *Micro sporium gypsum*, *Trycho phyton mentagrophytes*, *Malbranchea sp.*, *Anixiopsis sp.*, *Arthoderma benhiman*, *Keratinophyton sp.* are some common keratinophilic fungi reported from soil of Madhya Pradesh.
505. **Bourasi, S.K., Singh, S.D., Patil, P., Parihar, S.S. & Verma, A. 2016.** "A study on diversity of diatom flora of river Narmada at district Harda, Madhya Pradesh". *Int. J. Bot. Stud.* 1(5): 6–8. Abstract: The diversity of diatom flora of river Narmada at district Harda, (M. P.) for the period of one year from in July 2015 to June 2016 have been studied. 16 genera and 45 species reported in river Narmada. During study it was found that taxa of diatoms are *Fragilaria papillosa*, *Navicula cryptocephala*, *N. rostrata*, *Nitzschina obtuse*, *Gomphonema olivacem*, *Cymbella australica*, and *C. saffinis* were found to dominate. The diatom population much fluctuates during the climate change. Population of diatom was decrease during the month of April to June due to the various abiotic factors which influence diatom. Light, temperature, turbidity and dissolve Oxygen are the most valuable factor for the growth of diatom.
506. **Chatterjee, Tanushree, Sahu, Pradeep Kumar & Chatterjee, Shilpi. 2011.** "Occurrence of Gigasporomycota spores and some Arbuscular mycorrhiza fungal species in iron mines fields in Chhattisgarh". *Res. J. Sci. & Technol.* 3(4): 208–211. Abstract: Fungi within the phylum Gigasporomycota were investigated in iron mines fields in Chhattisgarh. Chhattisgarh is located between 21.27°N 81.60°E. The fungi within this phylum form



arbuscular mycorrhizal symbiosis with plant roots. Sampling of soil was carried out to a depth of 30 cm in the rhizosphere. Arbuscular mycorrhizal fungi were found at all 10 sampling sites in each field, at densities in between 0 to 03 spores per g dry weight of soil. Significant differences in spore densities were found between unmined, mined and dumped area of iron mines fields. Our study revealed that the upper half (0-15 cm) of the soil profiles had significantly more spores than the lower half (15-30 cm). Spores from ten sampling sites were identified from the indigenous soils. Almost 90% were shown to belong to the genus *Gigaspora*. The other genera found were *Glomus* and *Sclerocystis*.

507. **Chauhan, R., Raghuwanshi, A. & Khare, P. 2013.** "Qualitative and quantitative enumeration of phytoplankton in Chiklod lake of Raisen (M.P)". *Life Sci. Bull.* 10(1): 155–157. Abstract: Phytoplanktons were recorded from Chiklod lake during two years study period. Qualitative and quantitative analysis of phytoplankton was done by using hauling no. 130 plankton net in order to get a random sample from five different sampling stations at Chiklod lake. A total number 27 genera of phytoplankton were recorded, out of them 11 were belonging to Chlorophyceae, 9 to Bacillariophyceae, 5 to Cyanophcease and 2 to Euglenophceae. On the basis of seasonal periodicity phytoplankton population at all the stations were recorded maximum density during winter months. Bacillariophyceae contributed the bulk of the population. *Melosira granulata* was the main contributor to the class. Chlorophyceae was the next dominant class and contributed maximum density during the late winter-early summer period. *Pediastrum* species contributed the bulk of the class. Cyanophcease the third class in the sequence of dominance achieved maximum numbers during the late winter-early summer, *Microcystis aeruginosa* was the lone species, which contributed the bulk density of the class. Euglenophyceae contains *Euglena acus* and *Phacus* species was found in small, some times very minute bodies of water. In view of these findings it may be concluded that the present water body has not attained the highest trophic status as yet, but is heading towards the eutrophic status.
508. **Chauksay, P. Rai, A.N., Tripathi, S.N. & Verma, Naveen. 2008.** "Some additions to the fungus genus *Cercospora* Fres. from Central India". *J. Bot. Soc. Univ. Sagar* 43: 68–73. Abstract: Two new species of *Cercospora* viz. *C. garhpahriae* on *Adiantum cuneatum* (Adiantaceae) and *C. macroconidiophora* on *Dahalin tuberosa* (Asteraceae) are described and compared with allied species. These were collected from North Sagar Forest Division of Madhya Pradesh during survey and collection of plant parasitic fungi.
509. **Choudhary, V. & Jain, P.C. 2012.** "Screening of alkaline protease production by fungal isolates from different habitats of Sagar and Jabalpur district (M.P)". *J. Acad. Indus. Res.* 1(4): 215–220.
510. **Das, C.R. 1984.** "Ferns of Bastar district of (M.P.) in India". *J. Econ Taxon. Bot.* 5: 805–

807. Abstract: Bastar district of Madhya Pradesh in India represents 44 species of ferns. These species are not critically recognized and enumerated for this district as yet.
511. **Das, C.R. & Datta, A. 1980.** "New records of seven ferns from Bastar district, Madhya Pradesh". *Bull. Bot. Surv. India* 22(1-4): 226–227. Abstract: A study of the fern gathering of Ga. Panigrahi in 1963 and C.R. Das & Amar Nath in 1971 from Bailadila, Bastar reveals that seven species of ferns, viz., *Lindsaea malabarica* (Bedd.) Baker ex Christensen (Dennstedtiaceae), *Pronephrium lakhimpurens* (Rosenst.) Holttum, *Christella dentata* (Forssk.) Brownsey & Jermy, *C. subpubescens* (Blume) Holttum (Thelypteridaceae), *Diplazium dilatatum* Blume, *Hypodematium crenatum* (Forssk.) Kuhn (Aspleniaceae) and *Nephrolepis exaltata* (L.) Schott (Davalliaceae) were not reported earlier and are new record for Madhya Pradesh.
512. **Deshmukh, S.K. & Agrawal, S.C. 1983.** "Prevalence of Dermatophytes and other Keratinophilic fungi in soil of Madhya Pradesh (India)". *Mykosen* 26: 574–577.
513. **Dixit, M., Alia, A., Shrivastava, P. & Saify, T. 2011.** "Cyanobacterial biodiversity from different sites of Shahpura lake, Bhopal (M.P.)". *Life Sci. Bull.* 8(2): 315-318. Abstract: Biodiversity is a key factor in ecology, directly associated with the regulation and functioning of the ecosystems. Several biotic and abiotic factors contribute to variability in algal diversity in aquatic ecosystems. The algae are natural inhabitants of water. It plays a major role as a primary producer component in lakes. Algae are involved in the water pollution in different ways but the selective algal, group such as cyanobacteria have gained recognition as water contaminants. They form dense uni algal group often called as 'bloom' and are capable of elaborating potentially lethal toxins. In the present investigation cyanobacterial population from different sites of Shahpura lake have been recorded. Shahpura lake is mainly polluted by domestic sewage. Samples were collected monthly from October, 2007 to May, 2008 from two sampling station (Dhobi ghat and Manisha market park) at different depth: epilimnion and hypolimnion layer. In the study period nine genera of cyanophyceae were observed. Massive blooms of *Microcystis aeruginosa* were recorded, which had a significant effect in reducing the other cyanobacterial population. The following genera were also found: *Anabaena*, *Aphenocapsa*, *Arthrospira*, *Merismopedia*, *Nostoc*, *Oscillatoria*, *Phormidium* and *Spirulina*. In Shahpura lake all these nine genera were present during summer season, while the minimum were recorded as five during winter.
514. **Dixit, R.D. 1983.** "Four new species of *Selaginella* P. Beauv. from India". *Bull. Bot. Surv. India* 25(1-4): 223–227. Abstract: Four new species of *Selaginella*, viz., *S. coonooriana*, *S. jainii*, *S. panigrahi* and *S. panchghaniana* have been described from India. The first species is from Tamil Nadu, next two species from Madhya Pradesh and last species from Maharashtra.
515. **Dixit, R.D. 1989.** "Ecology and taxonomy of pteridophytes of Madhya Pradesh". *Indian*

- Fern J.* 6: 140–159. Abstract: The present paper provides data in respect of 36 families, 51 genera and 105 species. The name of the family, current botanical name, key to the genera and species, ecological data, distribution and important notes wherever found necessary have been provided. Seven new species of pteridophytes are known from Madhya Pradesh. It is interesting to observe that inspite of higher rainfall, the number of epiphytic pteridophytes is negligible although species of Himalayan and south Indian occurrence are present in the state.
516. **Dixit, R.D. & Tripathi, A.K. 1984.** “*Cyathea balakrishnanii* Dixit et Tripathi— A new species of tree fern from India”. *Bull. Bot. Surv. India* 26(3-4): 170–173. Abstract: *Cyathea balakrishnanii* Dixit et Tripathi (Cyatheaceae) is described in detail with illustrations as new to science. It is one of the common species occurring in Madhya Pradesh, Tamil Nadu and Kerala states in India.
517. **Dixit, R.D. & Singh, S. 2005.** “Diversity of pteridophytes in Chhattisgarh and their conservation”. *J. Econ. Taxon. Bot.* 29(2): 251–265. Abstract: The scrutiny of herbaria of BSA, SFRI, CAL, LWG and literature reveal that the occurrence of several families/ genera/ species which indicate the richness of diversity of pteridophytes in Chhattisgarh. The total number of 34 families, 49 genera and 89 taxa so far recorded from this state but, due to rapid industrialization and biotic interference the number is likely to be decreasing day by day, therefore one has to formulate conservation strategies to save the rich diversity of pteridophytes occurring in the state. The three species i.e. *Selaginella jainii* Dixit, *Selaginella panigrahi* Dixit and *Isoetes bilapurensis* Panigrahi are endemic to Chhattisgarh. The five dominant families possessing five species or more are Lindsaeaceae (5), Aspleniaceae (6), Polypodiaceae (70), Selaginellaceae (8) and Thelypteridaceae (9). The diversity aspect and conservation strategies are discussed.
518. **Dixit, S.K. & Roy, G.P. 1987.** “*Phrynium placentarium* (Lour.) Merr. (Marantaceae) – A new record for Madhya Pradesh”. *J. Econ. Taxon. Bot.* 11(1): 193–194. Abstract: *Phrynium placentarium* (Lour.) Merr. (Marantaceae) has been reported for the first time for the state of Madhya Pradesh from Abujh-Marh area, Bastar district.
519. **Dubey, R. & Pandey, A.K. 2011.** “New species of *Scytalidium* Pesante and *Sporidesmium* Link ex Fries from India”. *Nelumbo* 53: 1–6. Abstract: Present study deals with the illustration and description of two new dematiaceous hyphomycetes species viz., *Scytalidium zapotii* and *Sporidesmium officinale* from India. *Scytalidium zapotii* has been reported from Manegaw, Jabalpur on infected leaves of *Manilkara zapota* L. (Sapotaceae) and *Sporidesmium officinale* also reported from Jabalpur on dead stems of *Jasminum officinale* L. (Apocynaceae).
520. **Dubey, S. 2014.** “Two new species of Hyphomycetes, *Virgariella asirgadensis* and *Beltraniella pachmariensis* from Madhya Pradesh”. *Life Sci. Bull.* 11(1): 33–35. Abstract: *Virgariella asirgadensis* and *Beltraniella pachmariensis*, two new species described from

Madhya Pradesh.

521. **Dubey, S. 2014.** "Studies on Hyphomycetes from Madhya Pradesh". *Life Sci. Bull.* 11(2): 125–127. Abstract: Two new species, *Helicomycetes jamunae* Smita Dubey & H.N. Satya and *Avesicladiella pachmariensis* Smita Dubey & H.N. Satya are described, camera lucida diagrams of conidia, conidiophores and setae are given along with their measurement.
522. **Dubey, S. 2014.** "*Dictyosporium pachmariensis* and *Subramaniomyces pachmariensis* two new species of Hyphomycetes from Madhya Pradesh, India". *Life Sci. Bull.* 11(2): 131–133. Abstract: Two new species, *Dictyosporium pachmariensis* and *Subramaniomyces pachmariensis* two new species of Hyphomycetes are described. Diagrams are given along with justification for creating new species.
523. **Dubey, S. 2015.** "A new species of *Trichodochium indorensis* Smita Dubey and Satya from Indore (M.P.)". *Life Sci. Bull.* 12(1): 29–30. Abstract: A new species of Hyphomycetes, *Trichodochium indorensis* Smita Dubey and Satya has been described from Indore. Photographs sporodochium, conidia and setae are given.
524. **Dubey, S. 2015.** "*Dictyoarthrinium bostockiensis* a new species of Hyphomycetes from Indore (M.P.) India". *Life Sci. Bull.* 12(2): 137–138. Abstract: *Dictyoarthrinium bostockiensis* a new species of Hyphomycetes described and a key for seven species given along with diagrams and measurements of conidiophores and conidia.
525. **Dubey, S. 2015.** "A new species of *Tretopileus* Dodge from Khandwa (M.P.) India". *Life Sci. Bull.* 12(2): 161–162. Abstract: A new species of *Tretopileus* Dodge, viz., *T. khandwensis* has been described from Khandwa region of Madhya Pradesh.
526. **Dwevedi, S., Tiwari, M.K., Chauhan, U.K. & Pandey, A.K. 2012.** "Biodiversity of mushrooms of Amarkantak Biosphere Reserve forest of Central India". *Int. J. Pharm. Life Sci.* 3(1): 1363–1367. Abstract: Studies on the taxonomy and diversity of macro fungi are gaining importance as many macro fungi are becoming extinct and facing threat of extinction because of habitat destruction. Present study deals with the diversity of macrofungi in semi evergreen and moist deciduous forest of Amarkantak where more than 50 samples were collected which is situated in Madhya Pradesh in India. Amarkantak is located at 22°40'2" N 81°45'2" E / 22.67°N 81.75°E. It has an average elevation of 1048 meters (3438 ft.) More than 85% of annual average rain fall is received during the monsoon month extending from June to September. The mean annual rain fall for Amarkantak is about 1619.9 mm. distributed over ninety two average annual rainy days. The mean daily temperature ranges from 10.9°C (January) to 39.1°C (May). Amarkantak region is known for diverse macro fungal population. Extensive surveys were conducted from July 2010 to September 2010. Where collection, characterization, preservation and photo of macro fungal carried the genera like *Agaricus*, *Amanita*, *Nyctalis*, *Russula*, *Boletus*, *Macrolapiota*, *Ganoderma*, *Termitomyces* were identified. Out

- of 50 samples only 16 samples were identified up to species level. This preliminary study shows that the forest is very rich in mushroom diversity.
527. **Gautam, S.P. & Thakur, M.K, 1981.** "A note on the distribution of Hepaticae in Jabalpur, Madhya Pradesh (India)". *J. Econ. Taxon. Bot.* 2: 195–196. Abstract: Hepatic flora of Jabalpur is represented by 12 species of hepatics distributed over 8 genera. Most of the species grow abundantly on ridges particularly during July to November. Plants were collected during 15<sup>th</sup> to 25<sup>th</sup> November 1979.
528. **Graham, R.J.D. 1914.**"Notes on ferns collected at Pachmarhi, C.P.". *J. Bombay Nat. Hist. Soc.* 23(3): 498–501. Abstract: 41 species of fern belonging to 24 genera under 16 families has been collected from Pachmarhi, C.P.
529. **Grover, R.K. 1951-1952.** "Foliicolous Fungi of Sagar". *Bull. Bot. Soc. Univ. Saugar* 1&2: 9–13. Abstract: The present study was made with a view of making the survey of the foliicolous fungal flora of Sagar and its suburbs and reported 58 species. The collections were made during the period from November 1950 to February 1952. The neighbouring forests, fields and grasslands were scanned with the above purpose. The specimens were pressed, dried and mounted on herbarium sheets. The interesting fungi which were found on new hosts and a few others were taken up for detailed study and microtome sections were cut and stained. Detailed drawings were made and measurements taken in those cases. The rest were only listed after duly examining them both macroscopically and microscopically.
530. **Gupta, A.K. & Chauhan, S. 1996.** "Two new species of the genus *Penicillium* from Indian forests". *Indian Forester* 122(12): 1181–1182. Abstract: Two new species of the genus *Penicillium*, viz., *P. ootensis* belonging to the *Monoverticillata* and *P. pachmariensis* belonging to the *Asymmetrica velutina* section of Raper et al. (1949), isolated from Ooty, Tamil Nadu and Pachmari, Madhya Pradesh forest soils from India are described and illustrated.
531. **Gupta, R. & Asthana, A.K. 2018.** "Studies on species composition and diversity of Acrocarpousmosses at Pachmarhi Wildlife Sanctaury, Madhya Pradesh (India)". *Indian Forester* 144(6): 588–591. Abstract: The present study provides an insight into the habitat preferences and species composition of acrocarpous mosses of Pachmarhi sanctuary. Total 30 sites of collection have been undertaken and assessed during the course of study. The habitats have been selected keeping in mind the uniformity of data at all the sites. In the present study short turf (26 taxa) were dominant over tall turfs (13 taxa), cushions (7 taxa) and tails (2 taxa).
532. **Gupta, R., Nath, V., Pande, N. & Asthana, A.K. 2018.** "Diversity and species composition of family Hypnaceae (Bryophyta) at Pachmarhi Sanctaury (India)". *Indian J. Forest.* 41(4): 337–351. Abstract: The present study elucidates the current status of moss family Hypnaceae in Pachmarhi Sanctuary that is part of the Pachmarhi Biosphere Reserve

(PBR). On taxonomic assessment, Hypnaceae emerged as one of the dominant families of the sanctuary with seven genera and 12 species being present. The diversity and species composition of the taxa was assessed on six selected habitats viz., soil, dry rocks, wet rocks, soil covered rocks, stony walls and stem bark (epiphytic). These mosses have been mostly encountered from terrestrial habitats. The species composition across the habitats was much dissimilar indicating towards higher diversity of the family in PBR. Presently, *Ectropothecium cyperoides* (Hook.) A. Jaeger, *Ectropothecium rostellatum* (Mitt.) A. Jaeger, *Isopterygium assamicum* (Mitt.) A. Jaeger and *Hypnum plumaeforme* Wils. Are new additions to the moss flora of central India.

533. **Gupta, R.C. & Rajak, R.C. 1987.** Studies on the Ascomycetes of M.P.- II. *Hypoxyylon* from Jabalpur. In.: Hasija, S.K., Rajak, R.C. & Singh, S.M. (Eds.), *Prof. G.P. Agarwal Festschrift Volume I*. Today & Tomorrow's Printers & Publishers, New Delhi. Pp. 43–51.
534. **Gupta, S. 1990.** *Fungi of Jabalpur region with special reference to saprophytes*. Ph. D. Thesis, R.D. University, Jabalpur (Unpublished).
535. **Gupta, S., Mishra, A. & Gupta, A.K. 2012.** "Isolation and Identification of Keratinophilic Fungi from Soil of Gwalior Region and their Control by Methanolic Plant Extracts". *J. Biomed. Pharmaceut. Res.* 1(3): 1–21.
536. **Habib, I. 1991.** "Desmids from Udalkachar, Sarguja district, Madhya Pradesh, India". *Advances Pl. Sci.* 4(11): 248–251. Abstract: A survey of Udalkachar, Sarguja district (M.P.) revealed 16 desmid taxa belonging to 5 genera namely *Pleurotaenium*, *Euastrum*, *Cosmarium*, *Staurastrum* and *Arthrodesmus* being reported for the first time from this district during 1988-1989.
537. **Habib, I. 1992.** "Chlorococcales from Shahdol-I". *Biomed.* 3: 229–230.
538. **Harsh, N.S.K., Bisht, N.S. & Tiwari, C.K. 1997.** "Two new wood-decaying fungi from India". *Indian Forester* 123(11): 1001–1006. Abstract: Two new wood-decaying fungi namely *Hexagonia velutina* and *Microporus vernicipes* belonging to the order Aphyllophorales are being reported for the first time for India from Madhya Pradesh.
539. **Harsh, N.S.K., Nath, V. & Tiwari, C.K. 1997.** "Two new Cercosporae from Madhya Pradesh". *Indian J. Forest.* 12(1): 53–55. Abstract: Two new *Cercospora* viz., *Cercospora boswelliae* and *C. carissae* have been described from Jabalpur, Madhya Pradesh.
540. **Harsh, N.S.K., Tiwari, C.K. & Jamaluddin. 1993.** "Market potential of wild edible fungi in Madhya Pradesh". *Indian J. Trop. Biodiv.* 1(1): 93–98. Abstract: The present study is to explore the potential of wild edible fungi occurring in nature and being consumed and marketed by the tribals and forest dwellers in Madhya Pradesh. Two fungi were identified as *Scleroderma texense* and *Termitomyces* sp. and their market potential was worked out in Mandla, Balaghat, Shahdol and Rajnandgaon districts. The scope of these fungi for the upliftment of rural poor has also been discussed.

541. **Hasija, S.K., Malviya, H. & Rajak, R.C. 1990.** "Keratinophilic ability of some fungi isolated from gelatin factory campus, Jabalpur". *Proc. Natl. Acad. Sci. India* 60: 305–309. Abstract: The ability of five keratinophilic fungi, i.e., *Chrysosporium indicum*, *Geotrichum candidum*, *Gymnoascoideus petalosporus*, *Scopulariopsis brevicaulis*, and *Talaromyces trachyspermus*, to digest human hair keratin in stationary culture has been studied. Degradation of human scalp hair was studied by determination of cysteine, cystine, inorganic sulfate, thiosulfate, total protein, keratinase and change in alkalinity of culture filtrate. *Gymnoascoideus petalosporus* showed maximum degradation as compared to remaining isolates when grown on human scalp hair as the sole source of nutrients in vitro.
542. **Jadhav, S.K., Sahu, K. & Tiwari K.L. 1995.** "Aeromycoflora of Balodabazar: District-Raipur". *Fl. & Fauna* 1(2): 117–118. Abstract: Aeromycoflora in relation to environmental factors was studied and 24 fungal species were identified. Maximum (20 sp.) fungi were observed in winter season, minimum (9 sp.) in summer and moderate (15 sp.) in rainy season. Out of total fungal flora observed, the percentage contributions of different classes were as follows: Zygomycotina 12.50%, Ascomycotina 29.17%, Deuteromycotina 54.17% and Mycelia sterilia 4.17%. *Aspergillus* sp. 1 was dominant (27.94%) whereas, *Curvularia* sp. 1 (12.50%) and *Alternaria* sp. 1 (1.69%) were codominant fungal species.
543. **Jain, A.K. & Vyas, D. 2005.** "Therapeutic miracles of edible mushrooms". *J. Bot. Soc. Univ. Sagar* 40: 93–102. Abstract: As fungi have been eaten for more than three thousand years, there is no lack of information about their properties. Some of this is confusing, being based solely on tradition, but as scientific description, medical diagnosis and chemical analysis have progressed a stage has been reached when there is as much certainty as with other food. Recent researches have lent evidence to the ancient empirical observation of the oriental herbalists that some mushrooms possess potent therapeutic attributes. Among various medicinal mushrooms *Ganoderma lucidum* (Reishi), *Lentinus edodes* (Shiitake), *Cordyceps sinensis*, *Poria cocos*, *Tremella fullciformis*, *Auricularia auricula* (Wooden ear), *Hericium erinaceus*, *Grifola frondosa* (Maitake), *Flammulina velutipes* (Enokitake) and *Pleurotus* species (Oyster mushroom) have received greater attention. There are potentially important therapeutic properties of higher fungi such as antioxidant, anti-hypertensive, cholesterol lowering, liver protective, antifibrotic, anti-inflammatory, anti-diabetic, antiviral, antimicrobial and anti-carcinogenic activities.
544. **Jain, Neha. 2015.** "Diversity of blue-green algae and study on related physico-chemical parameters of paddy fields of Chhatarpur district of Madhya Pradesh". *Int. J. Res. Develop. Pharm. & Life Sci.* 4(2): 1456–1462. Abstract: Occurrence of Blue-green algae in local paddy fields of Chhatarpur district M.P. has been under taken for the first time in this area. A regular monthly collection has been made during cropping season May to October in year 2013. In the present investigation, rich diversity of Blue-green algae

was recorded. Total 66 blue-green algal species with wide range of thallus structure were found, belonging to various orders i.e., Chroococcales, Oscillatoriales, Nostocales, and Stigonematales etc. Total nine physico-chemical parameters (pH, EC, Temperature, soil N, P, K and Calcium content) were chosen for study. Chlorophyll-a content were also estimated during study period as an index of growth. This study reveals that comparatively lesser number of Blue-green algae were growing in summers in comparison to rainy season. The unicellular forms were abundant during summer while number of filamentous (heterocystous and non-heterocystous forms) increased during rainy season.

545. **Jain, S. & Rai, A.N. 2007.** "Three undescribed species of *Alternaria* Nees ex Fr. from India". *J. Bot. Soc. Univ. Sagar* 42: 87–94. Abstract: Present communication describes and illustrates three new species of *Alternaria* Nees ex Fr. viz., *A. asiatica* on an unidentified host, *A. fabacearum* on *Albizia* sp. Durazz. (Mimosaceae) and *A. gourae* on *Anthocephalus cadamba* (Roxb.) Miq. (Rubiaceae) collected during the follicolous mycotaxonomic survey of the forest flora of Indian subcontinent from Uttar Pradesh and Madhya Pradesh. The new fungal species have been described, illustrated and compared with allied taxa.
546. **Jain, S.L., Rai, A.N., Mehta, P. & Jain, S. 2004.** "Two new species of *Pseudocercospora* from Sagar (M.P.)". *J. Bot. Soc. Univ. Sagar* 39: 22–27. Abstract: A mycotaxonomic survey of the forest flora for the foliicolous fungal forms from Sagar revealed a large number of collections. Some of the interesting forms were given the detailed taxonomic treatment. The observations and microscopic preparations resulted into the description and illustrations of two interesting fungal specimens of *Pseudocercospora* viz., *P. kartae* sp. nov. on *Vitex negundo* Linn. (Verbenaceae), *P. meynae* sp. nov. on *Meyna laxiflora* Robyns. (Rubiaceae). During frequent survey of plant-parasitic fungi from forest area of Sagar the authors came across two interesting fungi associated with leaf spots of *Vitex negundo* Linn., and *Meyna laxiflora* Robyns. On the basis of detailed morphotaxonomic studies fungi were found to be undescribed taxa of *Pseudocercospora* Speg. which are described as under.
547. **Jha, A.K., Suman, N.R. & Rathore, D.K. 2003.** "Medicinal pteridophytes of Bastar, Chhattisgarh". *J. Econ. Taxon. Bot.* 27(4): 993–996. Abstract: In the present paper ethnomedicinal uses of 32 species of pteridophytes under 25 genera and 24 families, found in erstwhile Bastar, Chhattisgarh have been discussed.
548. **Joshi, I.J. & Chauhan, R.K.S. 1982.** "Distribution of soil Microfungi in various Types of Chambal Ravines". *Proc. Indian Natl. Sci. Acad. B.* 48 (4): 525–553.
549. **Joshi, I.J. & Saksena, S.B. 1983.** "Some fungi new to India". *J. Indian Bot. Soc.* 62: 351–356. Abstract: The paper embodies the description of nine fungal species out of which *Drechslera* state of *Trichometasphaeria pedicellata*, *Drechslera* state of *Cochliobolus*



*spicifer* and *Drechslera* state of *Setosphaeria rostrata* are new records to the fungi of India; *Fusarium acuminatum*, *F. moniliforme* var. *subglutinans*, *Bahupaathra samala* and *Gilmaniella humicola* are new substrate records to the country; and *Periconia macrospinosa* and *Humicola fusco-atra* are new additions to the fungi of Madhya Pradesh.

550. **Kapoor, R., Nath, V. & Asthana, A.K. 2008.** "Observations on spore morphology of some mosses from Amarkantak and adjoining areas". *Phytotaxonomy* 8: 120–125. Abstract: A Scanning Electron Microscope study has been made on the spores of nine species of mosses, viz., *Funaria hygrometrica* Hedw., *Erpodium mangiferae* C. Mueller, *Herpetineuron toccocae* (Sullivant & Lesquereux) Cardot, *Leveirella fabroniacea* C. Mueller, *Octoblepharum albidum* Hedw., *Microdus brasiliensis* (Duby) Ther., *Trematodon longicollis* Michx., *Garckea flexuosa* (Griff.) Margadant & Norkett and *Fissidens diversifolius* Mitt. From Amarkantak and adjoining areas. The nine species show four kinds of exine ornamentation patterns: granulate, papillate, gemmate and clavate. This investigation provides the first information on the sporoderm pattern of seven species of mosses.
551. **Kapoor, R., Nath, V. & Asthana, A.K. 2011.** "Bryophytes of Kanha National Park (Madhya Pradesh), India". *Nelumbo* 53: 140–144. Abstract: Bryophytes of Kanha National Park (Madhya Pradesh) have been enumerated and a preliminary list includes 11 genera and 15 species under 10 families. The study has revealed the occurrence of *Notothylas anaporata* Udar & Singh which is a new record for central India.
552. **Khan, S., Kanungo, V.K. & Jadhav, S.K. 2016.** "Variation in aeromycoflora of Raipur city with special reference to allergic diseases". *Indian J. Appl. Pure Biol.* 31(2): 131–152. Abstract: Raipur is a capital of Chhattisgarh and also an industrial and commercial hub of the state. Air pollution poses serious problems to human health in the city. More than 20- 30% of the world population is known to suffer from one or other allergic ailments such as allergic fungal sinusitis, allergic rhinitis, allergic asthma, eczema, atopic dermatitis, aspergillosis, mycosis etc. The main objective of the present study was to survey the diversity of aeromycoflora of Raipur city and to identify the important fungal spores or allergens responsible for various allergic diseases prevalent in Raipur city. In light of above facts aeromycological survey of some indoor sites and outdoor sites of Raipur city was conducted in monthly interval during the year 2013–2014. The fungal spores was studied by using Petri plate method. The results of the study indicated 67 fungal species in indoor sites while, a total of 82 fungal species in outdoor sites of Raipur city. The class wise respective number of fungal species in indoor sites was Zygomycotina 9, Ascomycotina 3, Anamorphic Fungi 54 and Mycellia sterillia type 1 while, in outdoor site number recorded was Zygomycotina 8, Ascomycotina 5, Anamorphic Fungi 67 and Mycellia sterillia 2. Survey on allergic diseases in Raipur city revealed that the allergic rhinitis and allergic asthma were dominant allergic diseases in Raipur city. Fungal spores of 11 species viz. *Cladosporium cladosporides*, *Aspergillus niger*,

*Cladosporium oxysporium*, *Aspergillus versicolor*, *Penicillium chrysogenum*, *Curvularia lunata*, *Alternaria alternata*, *Aspergillus flavus*, *Fusarium monalliformis*, *Phoma exigua* and *Rhizopus nigricans* were found to be the main cause of allergic diseases in Raipur city.

553. **Khare, B. 2014.** "Physico-chemical and cyanophitic variation of Motia tank, Bhopal". *Indian J. Appl. Pure Biol.* 29(2); 361–367. Abstract: The present studies focused on physico-chemical parameter and cyanophitic diversity of Motia tank. The physico-chemical parameters like temperature, water temperature, D.O., pH, free CO<sub>2</sub>, total alkalinity, total hardness, calcium hardness, chloride, phosphate and nitrate were studied to analyze the Motia tank. The study area selected was Cyanophitic diversity has been done with scientific name in this lake. These studies an attempt has been made to identify the taxa of Cyanophyta in pre-monsoon, monsoon, summer and post monsoon from July, 2007 to June, 2009.
554. **Khare, B. & Patil, P. 2013.** "Physico-chemical and cyanophytic variation of Shahpura like, Bhopal". *Indian J. Appl. Pure Biol.* 28(2): 311–322. Abstract: The present studies focused on Physico-chemical aspects and cyanophitic diversity of Shahpura Lake. The physico-chemical parameters like temperature, water temperature, D.O., pH, free CO<sub>2</sub>, total alkalinity, total hardness, calcium hardness, chloride, phosphate and nitrate were studied to analyze the Shahpura lake. The study area selected was cyanophitic diversity has been done with scientific name in this Lake. These studies an attempt has been made to identify the taxa of Cyanophyta in Pre monsoon, monsoon, summer and Post monsoon from July, 2007 to June, 2009.
555. **Khatri, Rajesh Kumar. 2002.** Studies on mushroom flora of Madhya Pradesh and Chhattisgarh with special reference to wild edible bamboo mushroom (*Cantharellus* spp.). Ph.D. Thesis submitted to Indira Gandhi Krishi Vishwavidyalaya, Raipur, Chhattisgarh. Abstract: 73 mushroom belonging to 56 genera were collected and identified of which 31 were edible, 3 fairly edible, 11 medicinal, 27 non-edible and 01 poisonous.
556. **Kumar, N., Singh, N. & Agarker, M.S. 1986.** "Some rare and interesting Chlorococcales from Jabalpur, M.P.". *Bionature* 6(1): 35–36. Abstract: An illustrated account of four members of Chlorococcales is given. Of the four forms three are not only new to Jabalpur but are new records for India. During the course of investigations as many as 77 species were collected. They are all new to this region and will be described in subsequent papers. However, three interesting species new to India and one rare one are being described.
557. **Kushwah, R. & Agarker, M.S. 1993.** "Terrestrial Oedogoniales from Madhya Pradesh". *Bionature* 13(2): 87–91. Abstract: Two taxa of *Oedogonium* and eight taxa of *Oedocladium* occurring in terrestrial habitates in Madhya Pradesh are being reported. Of them 5 taxa of *Oedocladium* namely, *O. albemarlenae*, *O. lewisii*, *O. medium*, *O.*

*tiffanyanum* and *O. wettsteinii* are new records for India and apart from these new records of *Oedocladium taxa*; *Oedogonium randhawae* is also new record for Madhya Pradesh. Some taxa appear to be restricted to certain areas while the others do not appear to have any specific environmental conditions.

558. **Kushwah, Rakesh & Agarker, M.S. 1993.** "Cluster analysis of algal communities of some selected soil types of Madhya Pradesh". *Bionature* 13(2): 93–35. Abstract: Cluster analysis was done through four methods: Single linkage, complete linkage, average linkage and weighted average linkage in order to determine the relationship of algal communities found to occur in fifteen localities of Madhya Pradesh occurring in some selected soil types. The localities have been divided into three categories cultivated, uncultivated and garden soils of Gwalior, Bhopal, Rewa, Jabalpur and Pachmarhi. It has been found that soil algal communities are dependent upon the nature of soil. Thus three distinct clusters are formed, one for cultivated, other for uncultivated and the third for garden soils. Dendrograms reveal that close linkages occur between cultivated fields at all the five areas studied. However it is interesting to note clustering of uncultivated soils of Pachmarhi with those of the garden soils of other areas of study. This may be due to migrating human populations.
559. **Kushwaha, R.K.S. & Pathak, R.K. 1980.** "Leaf Spot diseases of Sagar (M.P.)". *Bull. Bot. Soc. Univ. Saugar* 27: 87–88. Abstract: Leaf spots are more common diseases of many wild as well as cultivated plants. Most of these diseases are caused by the members of Deuteromycetes. These fungi are ubiquitous, occurring almost throughout the world. Some of them are, however, more pronounced parasites and are able to produce diseases causing huge losses. Isolations were made using surface sterilization method. In all 18 hosts were studied. Six genera with nine species were collected. The hosts and their respective pathogens are given. The occurrence of *Alternaria humicola* on *Mimusops elengi* and *Cocos nucifera*, *Cyrvularia lunata* on *Borassus flabellifer* and *Gloeosporium* sp. on *Cycas revoluta* form additional hosts for these pathogens and are being reported here for the first time from India.
560. **Lachoria, R., Jain, P.C. & Agrawal, S.C. 2004.** "Isolation of Keratinophilic fungi and related Dermatophytes from the soil of Sagar (M.P.), India". *Asian J. Microbiol., Biotech. & Environm. Sci.*6(2): 267–271.
561. **Lal, Jagdish & Kumar, Anand 1998.** "List of taxa of Pteridophytes not included in the flora of Madhya Pradesh. Volume I". *J. Econ.Taxon. Bot.* 22(3):657–660. Abstract: The paper records 36 taxa (34 species and 2 varieties) of pteridophytes belonging to 24 genera and 15 families, not included in the Flora of Madhya Pradesh- Volume I (Eds. Verma *et al.* 1993). Each taxa is appended with relevant taxonomic citation and distribution.

562. **Mehrotra, R.S. 1970–1971.** “Coprophilous fungi of Sagar”. *Bull. Bot. Soc. Univ. Saugar* 17&18: 45–47. Abstract: A systematics and ecological study of coprophilous fungi of Sagar has been made in this paper. Successional trends among the fungi and the relationship of the fungus to the substratum was studied. In all twenty species of Coprophilous fungi have been isolated from various dungs. Almost all the major groups of fungi were observed growing on dungs. The fungi generally grew well on dungs than on artificial synthetic media. Hence “Coprogen” like substances as visualized by Hesseltine et al. (1952) are considered to be essential elements for growth.
563. **Mehrotra, R.S. & Claudius, G.R. 1968.** “Aerospora of Saugar University campus”. *Bull. Bot. Soc. Univ. Saugar* 15(1&2): 18–22. Abstract: A total 29 number of species were collected as aerospora of Saugar University Campus. The collections were mostly confined to 7 months only and these months were rainy months and post-rain months. From the taxonomic point of view, *Aspergilli* were dominant which were followed by *Penicillia* and members of fungi imperfecti. Considering groupwise the following comments could be made. 12 species of *Aspergilli*, 3 species of *Penicillia* and 11 species of Fungi Imperfecti were collected. Another remarkable observation is that no phycomyces (except *Rhizopus* sp.) were collected during this period.
564. **Mohabe, S., Upreti, D.K. & Trivedi, S. 2014.** “Diversity of lichens in Umaria district, Madhya Pradesh”. *Phytotaxonomy* 14: 117–121. Abstract: The present paper enumerates occurrence of 34 species of lichens belonging to 15 genera and 11 families from Umaria district of Madhya Pradesh. Out of 34 species, 6 are new additions to the lichen flora of Madhya Pradesh. The district shows dominance of corticolous lichen and represented by 29 species followed by 4 species growing on rocks. The crustose lichens represented by 16 (47%) species exhibit their dominance followed by 13 (38%) species of foliose, 3 (9%) leprose and 2 (3%) squamulose lichens. A foliose species of lichen *Parmotrema praesorediosum* is most common in the area found growing both on bark and exposed rocks. The scattered pachy forests of *Shorea robusta*, in the district provide suitable habitats for the colonization of diverse lichen taxa. The members of the Physciaceae exhibit maximum diversity of lichens with 9 species. The Balhaun area exhibit the maximum diversity of 12 species followed by Chansura, Dodka and Bandhavgarh tala with 9 species each respectively.
565. **Mohabe, S., Mishra, G.K., Upreti, D.K. & Trivedi, S. 2012.** “Floristic study of lichens from Satna and Panna districts of Madhya Pradesh, India”. *Indian Forester* 138(11): 999–1001. Abstract: The paper enumerates 50 species of lichens belonging to 25 genera and 14 families from Satna and Panna districts in Vindhyan Range of Madhya Pradesh. The Satna district is represented by the occurrence of 40 species of lichens belonging to 23 genera under 13 families. The districts shows occurrence of 21 corticolous and 18 saxicolous species with dominance of crustose lichens represented by 25 species

followed by 8 species of squamulose and 7 of foliose lichens. The Panna district showed occurrence of 37 species belonging to 21 genera under 12 families. Both saxicolous and corticolous lichens are represented by 18 species each while a single species is found both on rocks and bark of trees. The crustose lichens dominate the district with 21 species, followed by 8, 6 and 2 species of foliose, squamulose and leprose form respectively. The *Mangifera indica* tree in dense, moist shady mango orchard exhibit luxuriant growth of lichens under Physciaceae family. Among the saxicolous genera, the crustose and squamulose growth form of the member of lichen families Teloschistaceae and Peltulaceae exhibit their luxuriant growth in the area.

566. **Mohabe, S., Upreti, D.K., Trivedi, S. & Mishra, G.K. 2010.** "Lichens flora of Rewa and Katni district of Madhya Pradesh". *Phytotaxonomy* 10: 122–126. Abstract: The paper enumerates 46 species of lichens belonging to 22 genera and 12 families from Rewa and Katni districts of Madhya Pradesh of which 15 species are recorded as new additions to the lichen flora of Madhya Pradesh. The district Rewa is represented by 30 species belonging to 19 genera and 11 families, while Katni has 44 species belonging to 21 genera and 12 families. The squamulose and crustose lichens dominate the districts represents by 18 and 15 species respectively, while foliose and leprose lichens are represented by 10 and 3 species only. Both the districts have habitats of exposed sandstones and siliceous rocks, which support many squamulose forms of lichens to colonize. *Mangifera indica* trees in both the districts bear luxuriant growth of crustose and foliose lichens, and mostly the members of Physciaceae and Pertusariaceae dominate the trees. The Sirmour Kyoti falls and Raghunathganj area in Rewa showed maximum diversity of lichens represented by 11 (saxicolous) and 12 (corticolous) species. The Bahoriband and Khitauli localities in Katni showed maximum diversity of lichens represented by 18 and 19 species respectively. The present enumeration of lichens from both the districts will provide useful data on the status of lichen diversity of the Vindhya range of Madhya Pradesh and also act as a base line record for carrying out biomonitoring studies in studies.
567. **More, A. & Billore, D.K. 2013.** "Phytoplankton diversity of river Narmada at Omkareshwar (M.P.)". *Life Sci. Bull.* 10(2): 341–343. Abstract: Biological assessment is a useful alternative for ecosystem since biological communities integrate the environmental effects of water chemistry. The most pollution tolerant genera and species of five groups of algae were recorded from the three sites of river Narmada.
568. **Nath, V. & Bansal, P. 2009.** "Bryophyte diversity of Bhimbetka World Heritage site, Madhya Pradesh (India)". *J. Indian Bot. Soc.* 88(3&4): 129–140. Abstract: Taxonomic observations, distribution, ecology, habitat and range of 11 species of mosses belonging to 7 genera and 6 families and a single species of liverwort diversity in Bhimbetka World Heritage Site is being documented. Out of 11 species of mosses occurring in

Bhembetka of Madhya Pradesh, *Brachymerium bryoides* Hook. ex Schwaegr, *Bryum capillare* L. ex Hedw., *B. porphyroneuron* C. Muell. var. *erythrinum* (Mitt.) Fleisch., *B. caespiticium* L. ex Hedw., *Philonotis thwaitesii* Mitt., *Plagiothecium cavifolium* (Bri.) Iwats., *Entodontopsis leucostega* (Brid.) Buck & Ireland, *Hyophila involuta* (Hook.) Jaeg., *H. comosa* Dix. & P. Varde, *Fissidens sylvaticus* Griff. var. *auriculatus* (C. Muell.) Gangulee, *F. virens* Thwait et Mitt. and a single species of liverworts *Riccia discolor* Lehm. et Lindenb. Were investigated from the study area. It is observed that *Entodontopsis leucostega*, *Philonotis thwaitesii*, *Brachymerium bryoides*, *Hyophila involuta*, *Riccia discolor* were the dominant taxa here. Plants grow on rocks and epiphytically on the tree bark, are found to be most successful taxa in the area. The critical survey and collection of bryophytes were made with the objective to provide the information on bryoflora of Bhimbetka for the first time.

569. **Nath, V.& Gupta, R.2007.**"*Barbula javanica* Doz. et Molk. (Pottiaceae)— A moss new to central India". *Phytotaxonomy* 7: 27–29. Abstract: *Barbula javanica* Doz. et Molk. has been recorded from Pachmarhi Biosphere Reserve, Madhya Pradesh (central India) for the first time This moss is characterised by erect, rarely branched habit, spatulate, soft and erectopotent leaves, papillose leaf cells, cylindrical capsule and filiform peristome.
570. **Nath, V.& Gupta, R.2009.**"Taxonomic assessment of family Bryaceae (Bryopsida) of Pachmarhi Biosphere Reserve (Madhya Pradesh), India". *Nelumbo* 51: 161–174. Abstract: None taxa belonging to Bryaceae: *Anomobryum auratum* (Mitt.) Jaeg., *Brachymerium acuminatum* Harv., *Brachymerium ptychothecium* (Besch.) Ochi, *Bryum argenteum* Hedw., *Bryum caespiticium* L. ex Hedw., *Bryum capillare* L. ex Hedw. *Bryum coronatum* Schwaegr., *Bryum paradoxum* var. *reflexifolium* (Ochi) Ochi and *Pohlia flexuosa* Hook., growing on various habitats in Pachmarhi Biosphere Reserve (PBR), between altitude 800-1060 m. have been assessed. These mosses are being reported from the Pachmarhi Biosphere Reserve for the first time.
571. **Nath, V.& Gupta, R.2009.**"*Hyophila involuta* (Hook.) Jaeg. – New addition to the bryoflora of Pachmarhi Biosphere Reserve". *Indian J. Forest.* 32(2): 297–299. Abstract: Genus *Hyophila* Brid.; a moss belonging to subfamily Barbuloideae, family Pottiaceae is represented by 7 species in India; out of these, three species: *H. involuta* (Hook.) Jaeg., *H. rosea* Williams and *H. comosa* Dix. et Verd. Occur in central India. Earlier *H. rosea* alone was reported from Pachmarhi Biosphere Reserve (PBR) but during floristic studies of bryophytes of PBR, which is well known for its biodiversity and is rich in bryophytic vegetation, *H. involuta* has been encountered for the first time. This taxon has been earlier reported from several other localities and shows wide distribution in India in Bengal, Bihar, Orissa, Arunachal Pradesh, Upper Assam, South India and Western Himalayas etc. *H. involuta* is characterised by dioecious plants, erect dark green habit and radiculose stem (5-18 mm in size). Leaves are oblong, spatulate, carinate with

percurrent costa, 1.8-2.8 mm x 0.56-0.86 mm, seta erect, capsule cylindrical with beaked operculum. Peristome is absent and spores are small, brown coloured, spherical, 8-12  $\mu\text{m}$  in diameter. The species is distributed in various localities of PBR. Tamia valley, Jambu Dweep near Police Training School, near Forest Office, Pandav Caves and Bee Fall. *H. involuta* closely resembles with *H. rosea* which occurs in the same vicinity, in leaf size and shape, leaf cells and shape of capsule; however it differs in its radiculose habit, uniform leaf arrangement, longer seta and smaller spores from the latter species.

572. **Nath, V., Asthana, A.K. & Gupta, R. 2012.** "Assessment of diversity and distribution of dominant Acrocarpous moss families in Pachmarhi Biosphere Reserve (Madhya Pradesh)". *Indian Forester* 138(10): 952–957. Abstract: Pachmarhi Biosphere Reserve (PBR) situated in Madhya Pradesh, India is well known for its biodiversity. Moss flora of the region is immensely significant considering the fact that mosses are abundantly found here. Most abundant families include Bryaceae (9), Pottiaceae (8), Dicranaceae (7) and Fissidentaceae (6) totalling 30 taxa. Interestingly, all the four moss families are acrocarpous indicating the dominance of erect mosses in the region. Further, *Fissidens* Hedw., *Bryum* Hedw., *Campylopus* Bridel. And *Hyophila* (Hook.) Jaeg. are the most abundant genera of these families. While Pottiaceae is dominant in terms of frequency of occurrence of its genera in different localities of PBR, Bryaceae shows maximum representation with 9 members. The mosses account for both epiphytic and terrestrial members and contribute substantially to the ecology and diversity of PBR.
573. **Nath, V., Asthana, A.K. & Kapoor, Ritu. 2005.** "A study on the genus *Fissidens* Hedw. (Musci) of Achanakmar Sanctuary (Chhattisgarh)". *Indian J. Forest.* 28(4): 433–438. Abstract: An illustrated morpho-taxonomical account of 5 species of the genus *Fissidens* Hedw. Viz., *F. involutus* Mitt. subsp. *curvato-involutus* (Dix.) Gangulee, *F. subpulchellus* Norkett, *F. diversifolius* Mitt., *F. taxifolius* Hedw., *F. sylvaticus* Griff. Var. *auriculatus* (C. Muell.) Gangulee of Achanakmar Wildlife Sanctuary (Bilaspur Division, Chhattisgarh) has been provided for the first time.
574. **Nayaka, S. & Upreti, D.K. 2007.** "Lichen diversity in Achanakmar Wildlife Sanctuary, core zone area of proposed Amarkantak Biosphere Reserve, Chhattisgarh". *J. Econ. Taxon. Bot.* 31(1): 133–142. Abstract: The paper enumerates the occurrence of 32 species belonging to 20 genera and 16 families of lichens in Achanakmar Wildlife Sanctuary. The sanctuary is dominated by crustose lichens. *Collema rysssoleum* (Tuck.) A. Schneider and *Pyxine cocoes* (Swartz) Nyl. were the only two foliose lichens in the area, while fruticose lichens are completely absent. The lichens of the sanctuary were mostly bark inhabiting represented by 20 species, followed by seven rock inhabiting species. *Fellhanera semecarpi* (Vainio) Vezda is the only leaf inhabiting lichen collected from the sanctuary. *Cryptothecia lunulata* (Zahlbr.) Makh. & Patw., *Letrouitia transgressa* (Malme) Haf. & Bellem and *Pyxine cocoes* (Swartz) Nyl. are the most common lichens of the

sanctuary. Beside low altitude, the dry and hot climatic conditions in the deciduous forest are the main reasons for the poor growth of the lichens in the area. The present study is the first enumeration of lichens from Achanakmar Wildlife Sanctuary. All the species enumerated in the present study is new to the lichen flora of the state. The available records of the lichens will play a vital role in conducting future biomonitoring studies in the area.

575. **Nayaka, S., Upreti, D.K. & Husain, T. 2005.** "Notes on some macro-fungi in proposed Achanakmar-Amarkantak Biosphere Reserve, Madhya Pradesh and Chhattisgarh". *Phytotaxonomy* 5: 96–99. Abstract: Enumeration of 15 macro-fungi growing on both living and decaying wood in the proposed Achanakmar Amarkantak Biosphere Reserve is provided. The moist shady localities in Kapildhara, Chaparwa and Kabirchabutra area exhibit good growth of most of the taxa.
576. **Pal, D.C., Soren, A.M. & Sen, R. 1984.** "A curative fungus from tribal areas". *Vanyajati* 32(3): 16–17.
577. **Pande, S.K. & Srivastava, K.P. 1952.** "The hepatic vegetation of Panchmarhi (Madhya Pradesh): A preliminary survey". *J. Indian Bot. Soc.* 31: 342–351. Abstract: A total 32 species, so far known from Pachmarhi, 20 are common to the western Himalayas, 17 to Eastern Himalayas, 21 to south India, while 13 of these occur in other parts of the country. A few of the species, apparently new to science, are confined to Pachmarhi. This in this region there occurs an admixture of the species of the Ghats and the Himalayas. Pachmarhi thus forms a meeting ground for the hepatic flora of the Himalayas and south India.
578. **Pandey, A. 1986.** Studies of keratinophilic mycoflora from Jabalpur soils. Ph. D. Thesis. Rani Durgavati Vishwa Vidhyalaya, Jabalpur.
579. **Pandey, A, Pandey, M. & Tomar, R.S. 2013.** "Isolation of opportunistic fungi from skin samples at Gwalior, Madhya Pradesh, India". *Int. J. Curr. Sci.* 7: 139–141. Abstract: Mycosis is one of the commonest finding in India during rainy season. It is generally believed that the largest no. of mycotic cases occur in humid climatic conditions. A mycological study was conducted on 168 cases for the isolation of opportunistic fungi from skin infection in Gwalior (M.P). Direct microscopy by KOH mount and culture was undertaken to isolate the fungal pathogen in each case. 143 out of 168 cases were positive by direct microscopy in which 125 were positive by culture. Opportunistic fungi isolated from 72 patients, out of which 56 patients were male and 16 were female. The commonest age group for skin infection involved was 30-40 yrs. Non-dermatophytic fungus like *Aspergillus niger* was the most common clinical presentation and isolated in 15 cases and *Candida* species were isolated in 28 cases. It was concluded that opportunistic fungi are emerging as important causes of skin infection.



580. **Pandey, A. & Singh, S.M. 1996.** "A new species of *Humicola* from India". *J. Indian Bot. Soc.* 75: 157–158. Abstract: A new species of *Humicola* viz., *H. jabalpurensis* has been described and illustrated from garbage soil of Marhatal, Jabalpur.
581. **Pandey, A., Agrawal, G.P. & Singh, S.M. 1990.** "Pathogenic fungi in soils of Jabalpur, India". *Mycoses* 33(3): 116–125.
582. **Pandey, R.K., & Kandya, A.K. 1981.** "An ecological note on the Smut disease of *Themeda quadrivalvis* (L.) O. Ktze. and *Setaria glauca* (L.) Beauv. grasses of Kanha Wildlife National Park". *Bull. Bot. Soc. Univ. Saugar* 28: 60–62. Abstract: Morphological anomalies in various plant-parts of *Themeda quadrivalvis* and *Setaria glauca* due to smut disease caused by *Ustilago* sps. were measured to find out the loss in animal fodder of the Park, since the diseased plant parts were reduced in size and weight normally.
583. **Panigrahi, G. & Dixit, R.D. 1966.** "New records of fern for Madhya Pradesh". *Proc. Natl. Acad. Sci. India* 36: 135–144.
584. **Parihar, S. 2018.** "Two new species of *Pithomyces* Brtkely & Brome from Sagar (M.P.) India". *Int. J. Bot. Stud.* 3(1): 67–69. Abstract: This paper gives an account of two new species, namely *Pithomyces cannacearum* on *Canna indica* L. (Cannaceae), and *Pithomyces careyae* on *Careya arborea* Roxb. (Lecythidaceae), Collected during the course of survey and investigation of the foliicolous fungi from Sagar (M.P.). The new fungal forms have been described, illustrated and compared with allied taxa after given the detailed mycotaxonomic treatment.
585. **Parihar, S. & Rai, A.N. 2018.** "Two new species of *Curvularia* Boedijn from Sagar (M.P.), India". *Int. J. Bot. Stud.* 3(2): 168–171. Abstract: During frequent and periodic survey for the collection of foliicolous fungi from the Sagar, Madhya Pradesh (India), a large number of specimens were collected. The detailed mycotaxonomic treatment was given to some of the interesting fungal specimen, which resulted into the description and illustration of two new species of genus *Curvularia* Boedijn namely *C. revenallae* sp. nov. on *Revenalla medagascariensis* J.F. Gmel. (Strelitziaceae) and *C. poacearum* sp. nov. on unidentified grass (Poaceae).
586. **Patel, R.P. & Sharma, N.D. 1997.** "Taxonomy of some powdery mildew fungi - III". *Advances Pl. Sci. Res.* 4: 1–22. Abstract: Powdery mildew fungi collected on twenty eight hosts from Jabalpur Division have been described using characters of current taxonomic importance in defining the imperfect stages of Erysiphaceae in modern sense. All the powdery mildew fungi have been grouped under euoidium conidiophore-type. *Cleistothecia* were observed in seven collections.
587. **Patel, U.S., Singh, R., Pandey, A.K. & Rajak, R.C. 1995.** "Fungi from Shahdol region- III, new hosts records of Deuteromycetes". *J. Econ. Taxon. Bot.* 19(2): 303–305. Abstract:

In this paper authors list fifty nine hosts/substrates which are new to India for seven coelomycetes and twenty five hyphomycetes.

588. **Pathak, H. & Arjaria, A. 2018.** "Study of leaf gall disease in seedlings of forest nurseries of Indore, Madhya Pradesh". *Vaniki Sandesh* 9(1): 21–26. Abstract: The study of plant galls has gained a significant importance in the field of plant pathology. The galls are produced by bacteria, fungi and insects. The galls produced on trees under the influence of insect parasites are characteristic. During the survey of diseases in seedlings, some species of tree seedlings viz., *Alstonia scholaris*, *Ficus racemosa*, *Pongamia pinnata*, *Eucalyptus*, *Cordia dichotoma*, *Terminalia tomentosa*, *Terminalia arjuna* and *Tectona grandis* were found to suffer from leaf galls in Forest nurseries of Indore district. These were found to be caused by insects. A brief report of this investigation is presented in this paper.
589. **Payasi, Y.K. & Pandey, Vivek Kumar. 2014.** "Study on phytoplankton density of Govindgarh reservoir". *Life Sci. Bull.* 11(1): 31–32. Abstract: Govindgarh reservoir is one of the unique water body in India and located in South of Rewa, district in Madhya Pradesh at a distance of 20 km from Rewa, with a longitude 24°20'25" and latitude 81°15'20", the lake is connected with all weather Rewa-Shahdol and Satna-Sidhi road. The status of phytoplankton in the reservoir is very nicely established. The order Sphaeropleales contains 11 species of phytoplankton and also showed their dominance in the reservoir. Afterwards order Pennales contains 8 species. Order Fragilariales contains only 2 species which was very few in the reservoir. The present study indicated total 41 numbers of species in the reservoir which showed the productivity of reservoir.
590. **Prajapati, A. & Tiwari, S.C. 2015.** "Terricolous lichens of Achanakmar-Amarkantak Biosphere Reserve". *Indian J. Appl. Pure Biol.* 30(1): 1–6. Abstract: Lichens have capability to grow on a variety of substrates (rock, soil, and trees) under extreme environmental conditions which make them cosmopolitan in nature. Basically there are four main types of lichen thalii recognizable on the basis of their general habit of growth, form and manner of attachment to the substrates; these are Crustose, Foliose, Squamulose and Fruticose. Due to variation in topography, soil structure and high rainfall, in combination with perennial and annual diverse environmental condition in Amarkantak lead to the luxuriant growth of lichens which have immense ecological value. The lichen species were collected and identified at the National Botanical Research Institute Lucknow and deposited at the Lichenology lab (LWG), Lucknow. Distribution of terricolous lichens in Amarkantak Maikal Mountain is represented by physical and biological factors: physical and chemical characteristics of the soil, moisture regimes, temperature, insulations, and development and composition of forest. Fruticose species are least abundant in exposed locations. The occurrences of only 3 lichen species in undisturbed site signify the rate of

soil degradation in Amarkantak tourist place. This paper describes and discusses terricolous lichen communities of dense Sal forests of Amarkantak.

591. **Prajapati, A., Tiwari, S.C. & Upreti, D.K. 2013.** "Diversity and distribution of epiphytic lichens of Achanakmar Tiger Reserve, Chhattisgarh". *Indian Forester* 139(6): 538–542. Abstract: Achanakmar Tiger Reserve in Chhattisgarh state is one of the highly potential conservational areas having rich floral and faunal diversity. The present study reveals the occurrence of epiphytic lichen flora of the Tiger Reserve. Arthorniaceae, Chrysothricaceae, Graphidaceae, Lecanoraceae, Parmeliaceae, Pertusariaceae, Physciaceae and Ramaliaceae are the most common among different lichen families while *Caloplaca*, *Cryptothecia*, *Dirinaria*, *Heterodermia*, *Lecanora*, *Lepraria*, *Parmotrema* and *Pertusaria* are the dominant lichen genera on trees. The crust forming together with leprose to sub-leprose lichens represents primary colonization of lichens in tropical dry and moist deciduous forests of the region comprising of young tree vegetation. The present study provides valuable information of lichen succession with respect to microclimatic condition.
592. **Prasad, H., Tiwari, Priti, Patra, S. & Ekka, M.K. 2016.** "Study of intramural aeromycoflora of zoological museum of Govt. Nagarjuna (P.G.) College of Science, Raipur (C.G.), India". *Indian J. Appl. Pure Biol.* 31(2): 143–150. Abstract: The paper deals with occurrence of fungal detriogens in indoor air in Zoological museum of Govt. Nagarjuna (P.G.) College of Science, Raipur (C.G.), India. A total of 14 fungal species belonging to 10 different genera were isolated from indoor environment of museum during winter season from November 2015-- February 2016. During this investigation period total 199 fungal colonies were isolated representing 14 fungal types. *Cladosporium cladosporioides* dominated the aeromycoflora followed by *Aspergillus niger*, *Aspergillus flavus*, *Aspergillus* sp., while the most frequent fungal species were *Aspergillus flavus*, *Aspergillus* sp. & *Cladosporium cladosporioides*.
593. **Rai, M.K. 1985.** "Taxonomic studies on species of *Phoma* isolated from air". *J. Econ Taxon. Bot.* 7: 645–647. Abstract: Diagnostic characters of five species of *Phoma* isolated from air of different places are described. The identification and description is based on comparative studies in pure culture. All the species described here are new to the air flora.
594. **Rai, M.K. 1992.** "On the incidence of *Raktaja krimi* (Dermatophytes) in Chhindwara, Madhya Pradesh". *Ancient Sci. Life* 12(1): 221–226. Abstract: A survey of *Raktaja Krimis* of Chhindwara was made during July, 1986 to June, 1987. *Tinea* infections were abundant followed by *Tinea cruris*, *Tinea pedis*, *Tinea capitis*, *Tinea barbae*, and *Tinea unguinum*. *Tinea* infections were common among the youth between 21-30 years. The percentage wise *tinea* infections were as follows: *Trichophyton rubrum* (64.5%), *T.*

- mentagrophytes* (5.37%), *T. violaceum* (1.07%), *Epidermophyton floccum* (18.12%), *Micrisporium gypseum* (7.52%) and *M. nanum* (5.37%).
595. **Rai, M.K. & David, M. 1985.** "A new leaf spot disease of *Holoptelea integrifolia* (Roxb.) Planch, from India". *J. Econ Taxon. Bot.* 7(3): 642. Abstract: In the present paper, *Coniothyrium fucklii* Sacc. is being described on *Holoptelea integrifolia* for the first time from India.
596. **Rai, M.K. & Qureshi, S. 1995.** "Comparative efficacy of four antimicrobials against Keratophilic fungi". *Ancient Sci. Life* 14(4): 281–285. Abstract: Comparative efficacy of miconazole nitrate, graphite, *Thuja* and *Chrysorobin* ointments was assessed against three keratinophilic fungi, viz., *Trichophyton terrestris*, *Chrysosporium tropicum* and *Microsporium gypseum*. All the test fungi were sensitive to the antimicrobials tested in the present study. Miconazole nitrate, showed the maximum activity followed by Graphite, and *Thuja*, whereas the minimum inhibition was exhibited by *Chrysorobin*. Among all the test fungi, *T. terrestris* was found to be the most sensitive fungus while *M. gypseum* showed the least activity.
597. **Rai, M.K. & Rajak, R.C. 1986.** "*Phoma multirostrata* on three new hosts". *J. Econ Taxon. Bot.* 8(1): 229–230. Abstract: In the present paper, *Phoma multirostrata* (Mathur *et al.*) Boerema is being described on *Cestrum nocturnum*, *Mangifera indica* and *Musa paradisiaca*. All the three hosts constitute new host-pathogen combination.
598. **Rajak, K., Sharma, Kavita & Verma, J.N. 2016.** "Study on distribution and diversity of phytoplankton in relation to physico-chemical parameters in Joratalab, Bilaspur, Chhattisgarh". *Indian J. Appl. Pure Biol.* 31(2): 159–164. Abstract: The Phytoplankton distribution and diversity was studied with compare to the physico-chemical parameters in Joratalab pond. Joratalab pond is situated at Sarkanda towards the North East of Bilaspur district at the distance of 5 km. This pond is medium size pond and the water of pond is use for domestic purpose like washing, bathing etc. A monthly sample was carried out from December 2012 to November 2013 at four different stations. Phytoplanktons of Joratalab is composed of four major groups namely Cyanophyceae, Chlorophyceae, Euglenophyceae and Bacillariophyceae. The density of Phytoplankton showed that the Chlorophyceae are dominated. In the present study the maximum density of phytoplankton recorded in April and minimum is in the month of August. During the investigation period it was observed that the Phytoplankton population density and diversity depends upon the physico-chemical parameters and shown significant correlation with the parameters like temperature, pH, mg, phosphate and D.O.
599. **Rajak, R.C. 1985.** "Fungi of Jabalpur". *J. Econ Taxon. Bot.* 7: 29–35. Abstract: The paper deals with 47 fungi which have been collected from various localities of Jabalpur and its suburbs. These include two new species and six new fungus records from India.

Rest have been collected on such plants which constitute new host for the respective fungi, from this country.

600. **Rajak, R.C. & Gupta, R.C. 1987.** "Studies on ascomycetes of M.P.- IV". *Biome* 2: 46–51.
601. **Rajak, R.C. & Pandey, A.K. 1985.** "Studies on ascomycetes of Madhya Pradesh- I. Three new ascomycetes from Jabalpur". *Indian Bot. Repert.* 4: 185–186.
602. **Rajak, C.R. & Pandey, R.K. 1985.** "Additions to the Fungi of India". *J. Econ. Taxon. Bot.* 7: 125–129. Abstract: Six Coelomycetous and three Hyphomycetous fungi are being described here, which are yet to be reported from India.
603. **Rajak, R.C., Pandey, A.K. & Agarwal, G.P. 1988.** "Some new species of *Eutypella* from Madhya Pradesh, India". *Proc. Natl. Acad. Sci. India* 58: 409–425.
604. **Rajak, R.C., Pandey, A.K. & Agarwal, G.P. 1991.** "Studies on ascomycetes of Madhya Pradesh- III. Seven new ascomycetes from Jabalpur". *J. Econ. Taxon. Bot.* 15: 161–166.
605. **Rajak, R.C., Rai, M.K. & Pandey A.K. 1988.** "Three new Coelomycetes from Madhya Pradesh". *J. Econ. Taxon. Bot.* 12(2): 405–408. Abstract: *Cytospora bougainvillea* sp. nov., *C. abutili* sp. nov. and *Phomopsis abutilonis* Sacc. are being described and illustrated here. The last named fungus is a new record for India from Madhya Pradesh.
606. **Rajak, R.C., Gupta, R.C., Belapurkar, U. & Pandey, A.K. 1993.** "Studies on the Ascomycetes of Madhya Pradesh IV: Four new species of *Bagnisiella* from Jabalpur". *J. Econ. Taxon. Bot.* 18(3): 546–549. Abstract: Four new species of the genus *Bagnisiella*, viz., *B. lantanae* sp. nov., *B. pithecolobiae* sp. nov., *B. nyctanthae* sp. nov. and *B. tectonae* sp. nov. has been described and illustrated based on collections from Madhya Pradesh.
607. **Rajak, R.C., Patel, U.S., Singh, Ranu & Pandey, A.K. 1993.** "Fungi from tropical moist and mixed forest of Shahdol region– I. Some new records". *J. Econ. Taxon. Bot.* 17(1): 109–112. Abstract: Present paper reports seven fungi collected from forest of Shahdol. *Tryblidiopycnis pinastri* Hohn. is a new generic record for India. *Dactylaria dioscoreae* B.M. Ellis makes a new addition to the fungi of India and rest viz., *Kendrikomyces indicus* Sutton, Rao & Mhasker, *Chaetospermum carneum* Tassi, *Excipularia marsupurensis* Subram., *Gyrothrix cercinata* (Berk. & Curt.) Hughes and *Triadelphia heterospora* Shearer & Crane constitute combinations on their respective substrates. A brief description of the fungi new to India has been discussed herewith.
608. **Rajak, R.C., Rajak, R.K., Pandey, A.K. & Pandey, S. 1987.** "A new record of *Phomopsis perciniosa* from India causing soft rot of Apples (*Pyrus malus*)". *J. Econ. Taxon. Bot.* 9(1): 65–67. Abstract: *Phomopsis perciniosa* Grove, causing soft rot of apples (*Pyrus malus* L.) is reported here for the first time from local fruit market at Jabalpur.
609. **Roy, S.K. & Singh, J.B. 1973.** "Cytological and ecological notes on ferns of Pachmarhi". *Pl. Sci.* 5: 1–16.

610. **Roy, S.K. & Singh, J.B. 1975.** "A note on the chromosome numbers in some ferns from Pachmarhi, central India". *Sci. & Cult.* 41(4): 181–183.
611. **Patidar, K.C. 1988.** "A note on the distribution of Bryophytes in Indore, Madhya Pradesh". *J. Econ. Taxon. Bot.* 12: 467–468. Abstract: Bryophytes of Indore is represented by 12 species distributed over 8 genera. These bryophytes grow abundantly in shady and moist places, and on the moist walls of old buildings during rainy season.
612. **Patidar, K.C., Jain, D. & Kaul, A. 1987.** "A note on the distribution of Hepaticae in Ujjain, Madhya Pradesh (India)". *J. Econ Taxon. Bot.* 9(2): 261–262. Abstract: Hepatic flora of Ujjain is represented by 5 species distributed over 4 genera. These hepatics grow abundantly on shady and moist places and on the walls of old temples during rainy season.
613. **Patidar, K.C., Jain, D. & Solanki C.M. 1985.** "Two species of *Riccia* from Pachmarhi". *J. Econ Taxon. Bot.* 6: 723–724. Abstract: *Riccia billardieri* Mont. Et Nees and *Riccia huebeneriana* Lindenb. are being reported first time for the *Hepatic* flora of Pachmarhi.
614. **Rahangdale, R. & Gupta, N. 1999.** "Vesicular-Arbuscular-Mycorrhizal association of biomass tree species in the tropical forests of Madhya Pradesh". *Indian J. Forest.* 22(1): 62–65. Abstract: Occurrence of VA-mycorrhizal symbiosis in forest trees has been evaluated in 46 species selected from biomass energy plantation at Raipur. Seedlings were raised in nursery using both the nursery bed and polypot methods having vertisol type of the indigenous soil. Roots of the seedlings were examined for VAM colonization after 150-180 days of growth. Out of the 46 species tested all but *Schrebera swietenoides* had the VAM colonization on their roots. It was found that the VAM colonization varied in % colonization from species to species which ranged from the least of 10% to the highest of 94% in *Scleichera oleosa* and *cassia fistula* respectively. Occurrences of the VAM symbiosis in plants belonging to many families are well distributed in the tropical forest of India. The VAM fungi associated with these tree species mainly belonged to the species of *Glomus*, *Acaulospora* and *Gigaspora*.
615. **Rai, M.K. & Sangar, R.B.S. 1987.** "A first report of *Sclerotium rolfsii* Sacc. anamorph of *Corticium rolfsii* Curzi on potato tubers from central India". *J. Econ Taxon. Bot.* 9(1): 69–70. Abstract: In the present paper, a sever tuber-rot disease of *Solanum tuberosum* caused by *Sclerotium rolfsii* anamorph of *Corticium rolfsii* is being described. The disease is hitherto undescribed from central India and being reported for the first time.
616. **Rajak, R.C. 1985.** "Fungi of Jabalpur". *J. Econ Taxon. Bot.* 7: 29–35. Abstract: The paper deals with 47 fungi which have been collected from various localities of Jabalpur and its suburbs. These include two new species and six new fungus records from India. Rest have been collected on such plants which constitute new host for the respective fungi, from this country.

617. **Rajak, R.C. & Pandey, A.K. 1984.** "New host records of fungi from India". *J. Econ. Taxon. Bot.* 5: 393–395. Abstract: In the present paper authors list nineteen hosts/substrates which are new to India for three ascomycetes and four hyphomycetes.
618. **Rajak, R.C., Rai, M.K. & Pandey, A.K. 1984.** "A new host record for two fungi". *J. Econ. Taxon. Bot.* 5: 39–40. Abstract: Two Coelomycetous fungi, viz., *Botrydiplodia theobromae* Pat. and *Macrophomina phaseolina* (Tassi) Goid. are being described on *Albizia lebbek* Benth. for the first time from India.
619. **Rathore, G. & Jain, S.K. 2014.** "Occurrence of Keratinophilic fungi from soils of Ujjain (Holy City), India". *Int. Res. J. Biol. Sci.* 3(10): 28–31.
620. **Raut, L. & Bharadwaj, A.K. 2017.** "A study of *Closterium* in Tapti pond of Multai, district Betul, M.P., India". *Int. J. Bot. Stud.* 2(5): 118–120. Abstract: This paper presents the diversity based study of *Closterium* in Tapti pond from Multai, district Betul (M.P.). *Closterium* is a crescent – shaped or elongate desmid. *Closterium* is a genus of unicellular Charophyte green algae in the family Closteriaceae. Some species of *Closterium* are straight and needle like, but most are broader with curved ends like smile. The ends of the cell are usually tapered and may be pointed or rounded. This placoderm, unstricted desmid is found in freshwater reservoirs like ponds, ditches, pools, streams etc, often mixed with some other free-floating algal members.
621. **Saini, D.C. 2005.** "Pteridophytic flora of Anuppur district, Madhya Pradesh". *J. Econ. Taxon. Bot.* 29(4): 713–732. Abstract: The present paper encompasses the floristic account of pteridophytes occur in Anuppur district of Madhya Pradesh. The enumeration comprises the alphabetical list of 46 plant species belonging to 32 genera and 19 families with correct botanical name, their natural order, basionym if any, available synonyms, local names, followed by description, field note and distribution of each species. Four species namely, *Adiantum capillus-veneris* Linn. f., *Equisetum debile* Roxb. ex Voucher, *Lygodium flexuosum* (Linn.) Sw. And *Psilotum nudum* (Linn.) Beauv. are reported endangered from the district. The area also harbours many rare species which need proper assessment and monitoring for their conservational measures.
622. **Saini, D.C. 2008.** "Traditional uses of pteridophytes among Baiga tribes of Amarkantak, Anuppur district, M.P.". *Ethnobotany* 20: 65–69. Abstract: The present paper is an endeavour to bring out the ethnomedicinal importance of pteridophytes occurring in various tribal localities of Amarkantak forest range in Anuppur district, Madhya Pradesh. The communication embodies an enumeration of 17 pteridophytic species belonging to 15 genera and 12 families used by Baiga tribes for treatment of different ailments and diseases, such as anthelmintic, antidote, aphrodisiac, caries, cold, cough, diarrhoea, diuretic, dysentery, eye diseases, genital diseases, headache, impotency, jaundice, kidney diseases, leprosy, litholyte, malaria, menorrhagea, piles, scrofula, skin diseases, sore

throat, stomach disorders and tuberculosis. The different parts of the plant used, methodologies involved in drug preparation, doses and mode of drug administration in different diseases are described.

623. **Saksena, S.B. 1951-52.** "A new remarkable member of Mucorales from Sagar". *Bull. Bot. Soc. Univ. Saugar* 1&2: 4. Abstract: A new mucoraceous fungus was isolated from a forest soil of Sagar. Preliminary isolations were made in plain agar, Waksman's agar and Potato-dextrose-agar using the dilution technique. Single spore isolations were made by transferring single germinating spores.
624. **Saksena, S.B. 1955.** "Ecological factors governing the distribution of soil microfungi in some forest soils of Sagar". *J. Indian Bot. Soc.* 34: 262–298. Abstract: An ecological study of the microfungi occurring in the various types of forest soils near Sagar has been made. The surface vegetation was recorded by laying quadrates of 25 x 25 feet and the flora was analysed for frequency, abundance and dominance of each tree species. The distribution of various groups of fungi has been studied. Three new genera and 3 new species were discovered during the course of these studies.
625. **Saksena, S.B. & Dhore, M.A. 1956.** "Taxonomic studies on Aspergilli of Sagar". *Bull. Bot. Soc. Univ. Saugar* 8(2): 41–65. Abstract: A systematic study of all the known species of *Aspergillus* collected from Sagar has been made. In all thirty-six isolates have been described in detail. These cover 23 species with a number of strains in some of them. All the cultures were grown for the purpose of identification of Czapek's agar medium and Thom and Raper's "Manual of Aspergilli" (1945) was used for their identification. A key for the identification of all species dealt with has been given.
626. **Sanghi, S.B. 2014.** "Studies on algal flora of Dangania pond, Raipur". *Indian J. Appl. Pure Biol.* 29(2): 309–311. Abstract: Present paper deals study on algal flora of Dangania pond, Raipur, Chhattisgarh. The Dangania pond water is mainly utilized for bathing and washing by human beings and cattle's therefore the quality of pond water has become highly eutrophic. The diverse algal varieties and forms were identified from this pond. The species of Euglenophyceae, Chlorophyceae and Cyanophyceae are growing dominance, which belongs to the tolerant species.
627. **Saxena, A.P. & Saksena, A. 1980.** "Liverworts of Chhatarpur (M.P.)". *Bull. Bot. Soc. Univ. Saugar* 27: 42–45. Abstract: A total of 10 species belonging to 6 genera and 4 families of liverworts have been collected from nearby localities of Chhatarpur (M.P.). The little known species of Indian hepatic vegetation viz., *Cynthodium cavermrum* Kunze, *Riccia cruciata* Kashyap and *Anthoceros crispulus* Mont., were confined to this area. These species are new records to Madhya Pradesh hepatic flora.
628. **Saxena, S.K. & Tripathi, J.P. 1988.** "Pteridophytic flora of Bundelkhand". *J. Indian Bot. Soc.* 67: 340–341. Abstract: The paper reports 10 species of pteridophytes and records their location and ecological preferences in the Bundelkhand region.



629. **Sen, N., Shukla, R.V. & Banerjee, K. 1999.** "Ecological studies on algae in river Hasdeo in Korba, Madhya Pradesh". *J. Indian Bot. Soc.* 78: 175–176. Abstract: The present communication gives an account of 102 genera collected from eight sampling stations along the river Hasdeo in Korba, Madhya Pradesh. The results of the investigation show that a change in the habitat quality of the water brings about a change in the distribution pattern of the algal flora in the river, so an ecological categorization is not possible.
630. **Sharma, C.D., Rai, A.N. & Vyas, K.M. 2006.** "An undescribed fungal genus of the forest flora of M.P. (India)". *J. Bot. Soc. Univ. Sagar* 41: 111–115. Abstract: During disease surveys of phytoparasitic fungi in central India, an interesting foliicolous hyphomycetous fungal specimen was collected from Bandhavgarh forest (Shahdol circle) of M.P. On the basis of detailed myco-morphotaxonomic treatment and observations, the fungus was found to be hitherto undescribed genus namect *Paradactylaria indica* gen. et sp. nov. occurring on the living leaves of *Erythrina suberosa*. It is described as under. *Paradactylaria indica* (Etym. Para = near) C.D. Sharma A.N. Rai and K.M. Vyas gen. et sp. nov.
631. **Sharma, C.D., Gadpandey, K.K., Rai, A.N. & Vyas, K.M. 1996.** "Some additions to the new hyphomycetous taxa from Indian sub-continent". *J. Indian Bot. Soc.* 75:37–40. Abstract:*Pseudocercospora chebulae* and *Pseudocercospora montanae* spp. nov. collected on *Terminalia chebula* Retz. and *Diospyros Montana* Roxb. from Madhya Pradesh, India are described, illustrated and compared with similar published species.
632. **Sharma, N.D. 1980.** "Some additions to fungi of India – VII". *J. Indian Bot. Soc.* 59: 33–36. Abstract: Four Fungi Imperfecti have been collected and described from Jabalpur, Madhya Pradesh, of which *Dichomera macrospora* sp. nov. a new species and *Diplodina watsoniana* Tassi, *Coryneum psidii* Sutton and *Sporidesmium bambusae* M.B. Ellis, are reported for the first time from India.
633. **Sharma, N.D. 1980.** "Some additions to fungi of India – VIII". *J. Indian Bot. Soc.* 59: 72–77. Abstract: The paper records nine different fungi which include *Catenularia hughesii*, *Coniosporium lagerstroemiae*, *C. sahnii*, *Oncopodium munjalii*, *Pseudospiropes bambusae*, *Sporidesmium bambusina*, six new species, and *Berkleasmium corticola* (Karst.) Moore, *Sporidesmium parvum* (Hughes) Ellis and *S. vagum* C.G. Nees & T.F.L. Nees ex Link, are three new records for the country.
634. **Sharma, N.D. & Mishra, R.P. 1977.** "Some additions to fungi of India – II". *J. Indian Bot. Soc.* 56: 130–141. Abstract: In the present paper twelve fungi belonging to the form class deuteromycetes are described from Jabalpur forests. These are: *Cercospora coixii* sp. nov. on *Coix lacryma-jobi* L., *C. thirumalacharii* sp. nov. on *Cajanus cajan* (L.) Mill., *Cercospora peristrophe* Sydow and Mitter var. *microspora* var. nov. on *Peristrophe bicalyculata* Nees, *Deightonella fimbristylidis* Sawada on *Fimbristylis ligulata* Govidar., *Microxyphiopsis byrsonimae* Batista on *Psidium guajava* L., *Microxyphiella subramanianii*

- sp. nov. on *Paspalum distichum* L., *Dendryphiella vinosa* (Berk. and Curt.) Reisinger on *Curcuma longa* L., *Volutina concentric* Penzing and Saccardo on *Capsicum annuum* L., *Memnoniella subsimplex* (Cooke) Deighton on *Curcuma longa* L., *Periconia byssoides* Pers. ex Merat on *Cajanus cajan* (L.) Mill., *Ustilaginoidea virens* (Cke.) Tak. on *Cheonachne koenigii* Thw. and *Arbuscua eugeniae* Batista and Peres. on *Eugenia jambolana* Lam.
635. **Sharma, R., Graser, Y. & Singh, S.K. 2013.** "Auxarthronopsis, a new genus of Onygenales isolated from the vicinity of Bandhavgarh National Park, India". *IMA Fungus* 4: 89–102.
636. **Sharma, R., Sharma R. & Crous, P.W. 2015.** "Matsushimamyces, a new genus of keratinophilic fungi from soil in central India". *IMA Fungus* 6(2): 337–343
637. **Shetye, P.K. 1957.** "Soil fungal flora of two forest communities of Amarkantak, M.P.". *Bull. Bot. Soc. Univ. Saugar* 9(1&2): 40–43. Abstract: Soil fungi have been studied from the two different forest communities (i.e., *Shorea robusta* and the *Boswellia serrata* communities) of Amarkantak forest. In all seventeen species have been isolated. The soil from the *Shorea robusta* community was more mature and richer in nutrients and had a larger content of fungi than the other soil which was from the *Boswellia serrata* community. *Penicillium parvum* was recorded for the first time from Indian soils.
638. **Shrivastav, V.K., Shukla, D., Parashar, D. & Shrivastav, A. 2013.** "Dermatophytes and related keratinophilic fungi isolated from the soil in Gwalior region of India and in vitro evaluation of antifungal activity of the selected plant extracts against these fungi". *J. Med. Pl. Res.* 7(28): 2136–2139.
639. **Shrivastava, Swadeep, Verma, Naveen, Yadav, Varun Raj & Rai, A.N. 2008.** "A new species of Pseudocercospora Speg. from Sagar (M.P)". *J. Bot. Soc. Univ. Saugar* 43: 35–38. Abstract: A periodic and frequent mycotaxonomic survey for the collection and study of the foliicolous fungi from the forest flora of Sagar led to the gathering of fungal specimens parasitizing a variety of angiospermic plants. Microscopic studies of some of the interesting fungal forms were prepared, examined and camera lucida drawings were made. Systematology, morphotaxonomy and authentic authoritative literature were used to identify the causal organisms. This has resulted into the description and illustration of one new species i.e. *Pseudocercospora centipediicola* parasitizing on *Centipeda minima*.
640. **Shrivastava, Swadeep, Yadav, Varun Raj, Verma, N. & Rai, A.N. 2008.** "A new addition to the foliicolous fungi from India". *J. Bot. Soc. Univ. Saugar* 43: 115–118. Abstract: During frequent and periodic survey for the collection of phytoparasitic fungi from the forest plant of M.P., a large number of specimens were collected. The detailed mycotaxonomic treatment was given to some of the interesting fungal specimen which resulted into the description and illustration of one new species namely *Cladosporium fici* infecting *Ficus glomerata*.
641. **Shukla, A.N. & Singh, K.P. 2009.** "Pteridophytic flora of Achanakmar-Amarkantak

- Biosphere Reserve, Central India". *Indian Forester* 135(2): 270–280. Abstract: The present paper deals with the systematic account of 35 species belonging to 25 genera and 18 families of pteridophytes. Key to the genera and species, along with correct nomenclature, brief description, ecological notes and specimens examined and distributional notes have been provided for their easy identification.
642. **Siddiqui, M.R. 1957.** "Two noteworthy Foliicolous fungi from Sagar". *Bull. Bot. Soc. Univ. Saugar* 9(1&2): 19–20. Abstract: The present paper deals with two interesting foliicolous fungi viz., *Phyllactinia acaciae* sp. nov. on leaves of *Acacia catechu* Willd. and *Ravenelia ornata* Syd. emend Sanwal on leaves of *Abrus precatorius* L. from Garhpahra, Sagar, Madhya Pradesh.
643. **Sikarwar, R.L.S. & Pande, H.C. 2010.** "Selaginella chrysocaulos (Hook. et Grev.) Spring—An Addition to the pteridophytic flora of central India". *J. Non-Timber Forest Prod.* 17(2):259–260. Abstract: Chitrakoot hill is most sacred and legendry hill for Hindu pilgrimages. It is situated on the border of Satna district of Madhya Pradesh. *Selaginella chrysocaulos* was collected from Satna district and is being reported for the first time from Central India. A complete description with illustration is provided.
644. **Singh, B. 2012.** *Ecological and ethnobotanical studies of pteridophytes of Satpura Hills.* Ph.D. Thesis, M.P. Bhoj Open University, Bhopal (Unpublished).
645. **Singh, B.P. & Upadhyay, R. 2010.** "Observation on some ferns of Pachmarhi Biosphere Reserve in traditional veterinary uses". *Indian Fern J.* 27: 94–100. Abstract: The present study mainly focuses on the traditional veterinary uses of ferns used by the tribes of Pachmarhi Biosphere Reserve, Hoshangabad district, Madhya Pradesh state, India. Observations on four fern species belonging to three genera and three families are presented in this paper. Their botanical names, family names, local names, habit and veterinary uses are provided.
646. **Singh, J., Gaur, S.S. & Rai, C.P. 2011.** "Disease survey of some important medicinal and aromatic plants of medicinal plant nurseries". *Vaniki Sandesh* 2(2): 22–23. Abstract: A survey conducted for the diseases of selected economically important medicinal and aromatic plants of two nurseries viz., SFRI medicinal plant nursery and JNKW medicinal plant nursery during the month of March 2011. During survey the most common diseases on all the plants were leaf spots, leaf blight etc. were observed.
647. **Singh, R. 2016.** "A study on Bacillariophytes of Satna city of Madhya Pradesh". *Life Sci. Bull.* 13(2): 153–154. Abstract: Wetlands of Satna district of Madhya Pradesh forms a potential risk for the environment due to human load by continuous recreation and tourism activities. Taste and odour of water of these wetlands linked with the presence of algal blooms. Some Bacillariophytes in wetlands of Satna city were observed and found that six genera were belonging to ten species. These species forming more eutrophic condition

of wetlands.

648. **Singh, S. & Dixit, R.D. 2005.** "Fern-allies of Central India". *J. Econ. Taxon. Bot.* 29(2): 403–413. Abstract: The present paper provides up to date data on the fern-allies of central India for the first time. 5 families, 9 genera and 22 species have been reported from various parts of Madhya Pradesh and Chhattisgarh states of central India. Keys to the genera and species are provided to facilitate easy identification. Enumeration of the each species of fern-allies with current nomenclature, basionym and important synonyms, notes on the ecology and distribution in central India and specimens examined have been provided.
649. **Singh, S. & Dixit, R.D. 2005.** "Studies on the morpho-taxonomy of Polypodiaceae of Central India". *Phytotaxonomy* 5: 63–67. Abstract: The present paper deals with morphology and the present taxonomic status of family Polypodiaceae in central India. The information is based on survey-cum-collection tours to various localities in central India, consultation of various Indian herbaria and published literature. The current findings reveal the occurrence of five genera and five species of Polypodiaceae in central India. None of the species is endemic to central India. The species are: *Pyrrosia adnascens* (Sw.) Ching, *Leptochilus axillaris* (Cav.) Kaulf, *Lepisorus nudus* (Hook.) Ching, *Paraleptochilus decurrens* (Bl.) Copel. and *Microsorium membranaceum* (D. Don) Ching. The paper provides key to the genera and species, current nomenclature, description, specimen examined, distribution in India, habit and habitat with ecological notes in respect of all species of Polypodiaceae in central India.
650. **Singh, S. & Dixit, R.D. 2008.** "Fern-allies of Central India". *J. Econ. Taxon. Bot.* 32 (1): 27–37. Abstract: The present paper provides up to date data on the fern-allies of central India for the first time. 5 families, 9 genera and 22 species have been reported from various parts of Madhya Pradesh and Chhattisgarh states of central India. Keys to the genera and species are provided to facilitate easy identification. Enumeration of each species of fern-allies with current nomenclature, basionyms and important synonyms, notes on the ecology and distribution in central India and specimens examined have been provided.
651. **Singh, S. & Sahu, T.R. 2015.** "Tree ferns of Pachmarhi Biosphere Reserve, Madhya Pradesh, India: Taxonomy, ethnobotany and conservation". *Int. J. Advanced Res.* 3(8): 566–577. Abstract: Tree ferns of the genus *Cyathea* belonging to the family Cyatheaceae, has 12 species in India. In the present observation only two species viz. *Cyathea gigantea* (Wall. ex Hook.) Holtt. and *Cyathea spinulosa* Wall. ex Hook. are naturally growing in the Pachmarhi Biosphere Reserve (MP). The local people collected their young shoots, leaves and pith for food and traditional medicine. The paper elucidates the current diversity, taxonomy, distribution, ecology and conservation status of the tree ferns in the

Biosphere Reserve on the basis of revisionary study and field survey. The observation made would be helpful in monitoring and management of remaining population of the tree ferns in the Biosphere Reserve.

652. **Singh, Shweta. 2010.** "A taxonomic survey of *Selaginella* of central India". *Indian Fern J.* 27: 263–272. Abstract: The present study provides a taxonomic account of *Selaginella* (the spike-mosses) in central India. The account is based on survey-cum-collection tours (2003-2009) to various localities in central India, consultation of various Indian herbaria and on published literature. *Selaginella* comprises about 41 species and 1 subspecies throughout India (Freser-Jenkins, 2008) of which 8 species are known from central India. Two of these species have been described as endemic to central India. The account gives their current nomenclature, a brief description, a list of specimens examined, notes on their habit and habitat with ecological and distributional notes in respect of all the central India *Selaginella* species.
653. **Singh, Shweta. 2010.** "Pteridophytic diversity of Kanger Valley National Park, Bastar, Chhattisgarh". *Indian Fern J.* 27: 346–362. Abstract: Kanger Valley National Park is a protected area that has been neglected in terms of pteridophytic exploration. The present work is an attempt to describe all the known taxa from there with current nomenclature, distribution, ecology, habit of each species and lists of specimens examined in order to facilitate easy identification in the field and herbarium. It is thus hoped to help fill the gap in our botanica knowledge in the fern flora of Chhattisgarh state. Variable altitude and climatic conditions combined with heavy rainfall have resulted in the existence of many ideal sites for the luxuriant growth of pteridophytes in the park. The vegetation is dominated by a mixture of dry and moist deciduous Sal forest types. A few patches of montane subtropical forest occur in the higher southernmost part of the park. A total of 39 species of pteridophytes in the park, belonging to 21 genera and 15 families are reported here. The two dominant families are Pteridaceae (7 species) and Thelypteridaceae (7 species) followed by Ophioglossaceae (4 species), *Selaginella* (4 species) and Woodsiaceae (3 species). The park also harbours some medicinally used pteridophytes such as *Adiantum philippense* L., *Dryopteris cochleata* (D. Don) C. Chr., *Selaginella bryopteris* (L.) Baker and *Tectaria caodunata* (Wall. ex Hook. & Grev.) C. Chr. etc. The taxa are enumerated alphabetically with full details given for each species reported from the National Park. The families are arranged after Kramer & Green (1990).
654. **Singh, Shweta. 2012.** "Systematic survey of family Isoetaceae in central India". *J. Econ. Taxon. Bot.* 36(2): 336–344. Abstract: The paper deals with present taxonomic status of family Isoetaceae in central India. It is represented by single genus *Isoetes* L., commonly known as Quillwort or Merlin grass. *Isoetes* L. is an ancient and heterosporous lycopods easily recognised in field by its specific habit and habitat. The monotic family

comprising about 150 species throughout the world, out of which only 16 species have been reported from India. In central India, it is represented by 9 species. Five species, viz. *Isoetes bilaspurensis* Panigr., *I. mahadevensis* Srivastava, Pant & Shukla, *I. pantii* Goswami & Arya, *I. panchananii* Pant & Srivastava var. *panchananii* and *I. panchananii* var. *panchmarhiensis* Srivastava, Pant & Shukla are endemic to the central India. The account is based on survey-cum-collection tours (2003-2009) to various localities in central India, consultation of various Indian herbaria and on published literature. The paper provides key to the species, current nomenclature, brief description, specimens examined, distribution in India, habit and habitat with ecological notes in respect of all the 9 species of Isoetaceae in central India.

655. **Singh, Shweta, Dixit, R.D. & Sahu, T.R. 2005.** "Pteridophytes diversity of Sanjay National Park, Madhya Pradesh". *Indian Forester* 131(1): 574–582. Abstract: Pteridophytes form the dominant part of ground vegetation during rainy season. Total number of 14 families, 19 genera and 30 species of pteridophytes have been reported on the basis of published literature, herbarium consultation (BSA) and collection made by the author (Shweta Singh) from the area under report. The dominant families are Thelypteridaceae (6 species) and Polypodiaceae (3 species) respectively. Sanjay National Park consists of dense moist deciduous Sal forest. *Madhuca* and *Diospyros* species are also abundantly found in the park. *Dryopteris cochleata* (Buch.-Ham. ex D. Don) C. Chr. Occurs as common fern in the park. The species of *Adiantum* L., *Selaginella* P. Beauv., *Tectaria* Cav. and *Dryopteris* Adanson are medicinally used by local people in the area.
656. **Singh, Shweta, Dixit, R.D. & Sahu, T.R. 2005.** "Pteridophytes diversity of Amarkantak, Anuppur district (M.P.)". *J. Econ. Taxon. Bot.* 29(3): 504–512. Abstract: The present paper is the result of intensive studies of pteridophytic flora, carried out on the basis of exclusive collection during the survey of various localities of Amarkantak. Scrutiny of the collected specimens, consultation of various Indian herbaria and published literature depict the total number of 18 families, 26 genera and 34 species of pteridophytes from the area. The paper provides current nomenclature, habit and habitat with ecological notes, specimens examined and distribution in respect of all the species reported from the area.
657. **Singh, Shweta, Dixit, R.D. & Sahu, T.R. 2006.** "Pteridophytic diversity of Kanger Valley National Park, Jagdalpur (Bastar), Chhattishgarh". *J. Bot. Soc. Univ. Sagar* 41: 116–133. Abstract: The present communication is the result of intensive studies on pteridophytic diversity carried out on the basis of exclusive collection of pteridophytes from the Kanger Valley National Park, Jagdalpur (Bastar), Chhattishgarh. Scrutiny of the collected specimens, consultation of various Indian herbaria and published literature depict the total number of 20 families, 25 genera and 41 species of pteridophytes from the area.

The dominant families are Thelypteridaceae (5 genera & 7 Species) and Selaginellaceae (4 Species). All known taxa are enumerated with current nomenclature, habit and habitat, ecology, specimens examined and distribution in respect of all the species reported from the National Park. The families are arranged after Pichi Sermolli (1977) classification.

658. **Singh, Shweta, Dixit, R.D. & Sahu, T.R. 2006.** "Systematic account of Family Isoetaceae in Central India". *J. Bot. Soc. Univ. Sagar* 41: 142–153. Abstract: The paper deals with present taxonomic status of family Isoetaceae in central India. It is represented by single genus "*Isoetes* L." commonly known as Quillwort or Merlin's grass, *Isoetes* L. is an ancient and heterosporous lycopod easily recognized in field by its specific habit and habitat. The monotypic family comprising about 150 species throughout the world flora out of which only 16 species have been reported from India. In Central India it is being represented by 9 species. Five species viz., *Isoetes bilapurensis* Panigr., *I. mahadevensis* Srivastava, Pant et Shukla and *I. pantii* Goswami et Arya, *I. panchananii* var. *panchananii* Pant et Srivastava, and *I. panchananii* var. *panchmarhiensis* Srivastava, Pant et Shukla are endemic to Central India. The present information is based on survey cum collection tour to various localities in Central India, consultation of various Indian herbaria and published literature. The paper provides key species, current nomenclature, brief description, specimens examined, distribution in India, habit and habitat with ecological notes in respect of all the 9 species of Isoetaceae in Central India.
659. **Singh, S.M. 1972.** "Two new fungus records from India". *Bull. Bot. Soc. Univ. Saugar* 19(1&2): 45–46. Abstract: Two Fungi-Imperfectii causing plant diseases at Balaghat are being described herein. These fungi and their hosts are new records for the country. *Cercospora pini-densiflorae* Hore et Nambu is a new fungus record for the country and *Pinus roxburghii* is a new host record for this fungus and *Phomopsis bauhiniae* Bausa Alealde is another new fungus record for this country and *Bauhinia purpurea* is a new host record for this fungus.
660. **Singh, S.S. 1969.** "Some stilbaceous fungi from Chhatarpur soils". *Bull. Bot. Soc. Univ. Saugar* 16(1&2): 33–36. Abstract: This paper deals in details about three fungi (*Graphium bulbicola* Hennings, *Systanus stemonites* (Persoon) Corda and *Trichurus spiralis* Hasselbring (var. *minuta*) isolated from the soil. Out of these three fungi, *G. bulbicola* is reported for the first time from India.
661. **Singh, S.S. & Saksena, S.B. 1970–1971.** "Some fungi new to India". *Bull. Bot. Soc. Univ. Saugar* 17&18: 11–16. Abstract: This paper deals in detail about seven interesting fungi (*Gelasinospora cerealis* Dowding, *Gliocladium catenulatum* Gilman and Abbott, *Oidiodendron griseum* Robak, *Stackybotrys cylindrispora* Jensen, *Bipolaris pedicellata* (A.W. Henry) Shoemaker, *Chaetomella rapkigera* Swift, *Papulaspora magnifica* Seaver,

isolated from Chhatarpur soils, which are being reported for the first time from India. These fungi were isolated during a study of soil fungal flora of Chhatarpur.

662. **Sinha, B.K., Shukla, B.K. & Sharma, P. 2007.** "Diversity and distribution of the pteridophytic flora of Pachmarhi Biosphere Reserve, Madhya Pradesh". *J. Econ. Taxon. Bot.* 31(1): 40–69. Abstract: The pteridophytic flora of Pachmarhi Biosphere Reserve is unique and richest in the central India in respect of density and diversity. The present paper deals with the taxonomic account of 99 species belonging to 46 genera and 32 families of pteridophytes. Out of these, three species are endemic viz., *Selaginella jainii* Dixit, *Isoetes pachananii* Pant & Srivastava and *I. mahadevensis* Srivastava, Pant & Shukla and 21 species are rare due to their restricted distribution. Key to the genera and species, along with correct nomenclature, brief description, ecology and distributional notes, have been provided for their easy identification. Strategies and measures on the conservation of rare species have also been proposed.
663. **Sinha, D.K. 2005.** "Kosgai hills, Korba (Chhattisgarh state) a new locality of the 'Whisk Fern'— *Psilotum nudum* (L.) P. Beauv.". *Bull. Bot. Surv. India* 47(1-4): 143–144. Abstract: The present report of *Psilotum nudum* (L.) P. Beauv. is the first authentic report of its occurrence in the state of Chhattisgarh from Kosgai hills, Korba, almost after 20 years of its last report from Tamia forest in Madhya Pradesh.
664. **Sohani, S. 2015.** "Diversity of fresh water algae in river Narmada at Jalud (Mandleshwar) Indore, India". *Res. J. Recent Sci.* 4: 14–17. Abstract: Phytoplanktons are elemental factor of aquatic community as they are major sources of biologically significant and organic carbon, situated at the base of the food chain. The productivity and density of the phytoplanktons are majorly influenced by different physico-chemical characteristics of water. Algae are very useful for eutrophication estimation. Quality and distribution of algal flora in river have been carried out systematically to evolve algal indices of pollution. The present paper deals with the assessment of water quality and phytoplankton diversity of river Narmada at Jalud. Phytoplankton of the River Narmada consisted mostly of Chlorophyceae (green algae) Bacillariophyceae (Diatoms). In river Narmada the temporal series of phytoplankton groups is remarked as Chlorophyceae > Bacillariophyceae > Cyanophyceae > Euglenophyceae. The species distribution, abundance and composition of phytoplankton community are governed by various physico-chemical elements of the water body. The population of Plankton varies in different seasons and months.
665. **Somal, B.S., Ali, S.S. & Saxena, S.B. 1968.** "Fungi causing fruit and vegetable rot at Sagar". *Bull. Bot. Soc. Univ. Saugar* 15(1 & 2): 44–46. Abstract: The present work was undertaken with a view to gather information on the occurrence of different diseases of fruits and vegetables at Sagar. Besides the diseases in storage an effort was also made to survey the fields and orchards to collect diseases from there. A study of fungi which cause the rots of fruits and vegetables at Sagar has been made. Attacked material was



collected from fields, orchards and local market. In all 32 species of fungi were isolated from 23 different hosts.

666. **Soni, Indu, Patra, Sunita & Tiwari, Priti. 2016.** "Study of aeromycoflora in Indore environment of college building". *Indian J. Appl. Pure Biol.* 31(2): 151–158. Abstract: Airborne micro fungal proggules are found in large numbers in indoor and outdoor environments and are widely distributed in nature. Some of them have the potentiality to cause allergies, spoilage of foods and many other adverse health effects. Present investigation focuses on aeromycobial survey of government college building of Sakti, distt. Janjgir Champa (C.G.). It is a study carried out between July 2015 and December 2015. Environmental factors play an important role in the distribution of the fungal spores. Fungi are diverse groups of organisms and have been found in large amount in the environment. Air almost always contains spores, but the number and type of spores depend on the time of the day, weather, season and geographical location. Aeromycoflora simply refers to the airborne fungal contributors of the environment. A large number of airborne mycofungal propaguls are found in indoor environment which are generally widely distributed in nature. The aim of this study is to determine the aeromicoflora, their identification, concentration and diversity in indoor environment to understand the cumulative aeromycoflora composition in the college environment. During the present investigation period of growth in population of fungal spores is observed. In the specified period of the six months growth of *Aspergillus niger*, *Rhizopus*, *Cladosporium*, *Fusarium* and *Oxysporum* was observed in high percentage in indoor environment.
667. **Soni, V.K., Harsh, N.S.K. & Baghel, L.M.S. 2006.** "Forest Fungi and their marketability - A case study". *J. Trop. Forest.* 22(1&2): 79–85. Abstract: Attempts were made to study the marketability and explore the market potential of wild edible fungi collected from forests and marketed by Gond tribe of Madhya Pradesh. Five fungi were identified as *Cantharellus* sp., *Macrolepiota procera*, *Podabrella microcarpa*, *Termitomyces heimii* and *Termitomyces clypeatus*. Market studies of these fungi have been done in local weekly market in Kundam block of Jabalpur district.
668. **Srivastava, G.K., Srivastava, M. & Shukla, P.K. 1997.** "Quillworts of Pachmarhi hills, central India". *Indian Fern J.* 14: 38–50. Abstract: The paper gives an account of the distribution, morphology and a key to the species of *Isoetes* L. occurring in Pachmarhi hills and their foot hills. A new variety of *Isoetes panchananii* Pant & Srivastava, viz., *I. panchananii* var. *panchmarhiensis* is also described.
669. **Suseela, M.R. & Toppo, K. 2010.** "Fresh water algal flora of Amarkantaka Biosphere, Madhya Pradesh, India". *J. Econ. Taxon. Bot.* 34(1): 37–41. Abstract: The present communication deals with 21 taxa of 12 genera of class Chlorophyceae. These taxa belongs to six families of Order Chlorococcales and one family of Order Zygnematales. All taxa have been reported for the first time from Amarkantaka Biosphere of Madhya

Pradesh.

670. **Suseela, M.R. & Toppo, K. 2011.** "Occurrence and diversity of *Staurastrum* species in lentic water bodies of Chhattisgarh state, India". *Ann. Forest.* 19(1): 80–90. Abstract: *Staurastrum* is one of the placoderm desmids, belonging to family Desmidiaceae, Order Zygnematales in the class Chlorophyceae. A total of 29 *Staurastrum* species recorded from different water bodies of Bastar, Bilaspur, Janjgir-Champa, Korba, Jashpur districts of Chhattisgarh state. All these species have been recorded for the first time from this part of India.
671. **Tiwari, A.P., Kumar, B. & Shukla, A.N. 2013.** "*Adiantum venustum* D. Don (Adiantaceae): A new distributional record for central India". *Indian J. Forest.* 36(1): 139–141. Abstract: *Adiantum venustum* D. Don (Adiantaceae) is reported as a new record for the pteridophytic flora of central India from Achanakmar-Amarkantak Biosphere Reserve. Detailed description, illustration and relevant notes are provided for its easy identification.
672. **Tiwari, C.K., Parihar, J. & Verma, R.K. 2010.** "Occurrence and distribution of wood decaying fungi in forest wood depots of Chhattisgarh". *Indian Forester* 136(4): 476–486. Abstract: The occurrence and distribution of 81 wood decaying fungi on different hosts in forest wood depots of Chhattisgarh is reported. The study area is confined to nine wood depots and each wood depots, depending on area occupied, is divided into five sectors. The maximum number of wood decaying fungi reported in Gariyabandh wood depot and minimum number of wood decaying fungi reported in Kota and Dhamtari. Out of 79 specimens, 3 species including *Schizophyllum commune* Fr., *Trametes cingulata* Berk. and *Flavodon flavus* (Klot.) Ryvarden, were common to all nine wood depots areas and show their occurrence and frequency 100%.
673. **Tiwari, D.P. & Agrawal, P.D. 1973.** "A new genus of hyphomycetes from soil". *J. Indian Bot. Soc.* 52: 133–138. Abstract: A fungus isolated from grassland soils of Jabalpur, M.P., India is assigned to a new genus *Agarwalia*. The genus is distinguished by the presence of thick pads of wall substance between the conidia of branched or unbranched conidial chains produced acropetally at the apex of conidiophores, and the distinct annular scars, both on conidia and conidiogenous cells, after detachment. A single species *A. terricola* is described.
674. **Tiwari, S.D.N. 1964.** "The ferns of Madhya Pradesh". *J. Indian Bot. Soc.* 43: 431–452. Abstract: In this paper 42 genera and 81 species of the order Filicales have been collected and reported from Madhya Pradesh.
675. **Toppo, K. & Suseela, M.R. 2007.** "Enumeration of blue green algal flora of Rani pond at Janjgir-Champa district in Chhattisgarh state, India". *Phytotaxonomy* 7: 44–46. Abstract: The paper enumerates 17 taxa of blue green alga of Rani pond of Janjgir-Champa district of Chhattisgarh; these belongs to 9 genera of Cyanophyceae. This area was surveyed for the first time.

676. **Udar, R. & Agarwal, A. 1985.** "The genus *Riccia* in Pachmarhi with SEM details of spores of two species". *J. Indian Bot. Soc.* 64: 246–250. Abstract: *Riccia cavernosa* Hoffm. emend., Raddi and *R. Stricta* Duthie ex Arnell have been described from Pachmarhi, Madhya Pradesh. The former had been erroneously recognised so far, in Indian bryology, under the specific epithet *R. Crystalline* L. while the latter is new to Indian bryoflora, previously known from South Africa. The taxonomic details as well as the SEM details of spores of both the species have been given.
677. **Vasudeva, S.M. 1995.** "Peculiarities of Pteridophytic flora of Pachmarhi, Satpura hills (Central India)". *Indian Fern J.* 12: 29–42. Abstract: The intensive studies on the ecology, distribution, phytogeography, taxonomy and cytology of pteridophytes of Pachmarhi, Satpura Hills in Central India have revealed that the Pteridophytic vegetation consists of a mixture of temperate and tropical elements and the region is remarkable in forming a meeting ground for the species characteristic to the Himalayas and the south Indian mountains but the flora is more akin to that of south India. From the region 10 species of fern allies and 68 species of ferns are recorded. As many as 20 members are recorded for the first time. Epiphytic fern growth is very scarce. Majority of the pteridophytic members are met with in the ravines and interior of the forests. Cytologically in conformity with the geographical situation, quite a number of central Indian members show intermediate polyploidy levels on species to species basis. The occurrence of several intraspecific cytotypes and hybrid species indicate that the region is in active state of evolution.
678. **Vasudeva, S.M. & Bir, S.S. 1982.** "Chromosome number and evolutionary status of ferns and fern allies of Pachmarhi Hills (Central India)". *Aspects Pl. Sci.* 6: 119–181.
679. **Vasudeva, S.M. & Bir, S.S. 1983.** *Chromosome numbers and evolutionary status of fern and fern allies of Pachmarhi Hills (Central India)*. International Bioscience Monographs. Today & Tomorrow's Printers & Publishers, New Delhi.
680. **Vasudeva, S.M. & Bir, S.S. 1987.** "Ecological and taxonomical observations on the pteridophytic flora of Tamia hills and Patal Kot Valley (Distt. Chhindwara), Madhya Pradesh, Central India". *Indian Fern J.* 4: 1–13. Abstract: Ecological and taxonomical studies on the pteridophytic flora of Tamia and Patal Kot situated in Satpura mountains in central India have indicated that (i) In spite of good rains and the presence of thick forests of primary 'teak' and 'sal' there is practically no epiphytic vegetation of ferns and fern allies. This is probably due to peculiar nature of the bark of the trees. (ii) Most of the ferns grow as lithophytes deep in ravines. Quite a few species grow in extremely exposed situations on mountain slopes. (iii) The region is rich in number of individuals of ferns rather than the number of species. Only five species of fern allies and 25 species of ferns are recorded from Tamia. From Patal Kot the recorded species are only seven. (iv) *Lycopodium*, *Isoetes*, *Ophioglossum*, *Angiopteris*, *Osmunda* and few other genera of

higher leptosporangiate ferns (*Pleopeltis*, *Microsorium*, *Pteris*, etc.) are conspicuous by their absence although these are met with at Pachmarhi an adjacent hill resort.

681. **Vasudeva, S.M. & Bir, S.S. 1992.** "Pteridophytic flora of Pachmarhi hills, Central India-I. (General account & families: Psilotaceae-Isoetaceae)". *Indian Fern J.* 9: 153–173. Abstract: Pachmarhi hills constituting part of Satpuras in central India do not support thick vegetation of fern and fern allies in spite of the fact that the region receives about 250 cms of annual rainfall. Only 10 members of fern allies grow in these hills with one species each of *Psilotum* (*P. nudum*), *Palhinhaea* (*P. cernua*), *Isoetes* (*I. panchananii*), 2 species of *Equisetum* (*E. Debile* and *E. Ramosissimum*) and 5 species of *Selaginella* (*S. ciliaris*, *S. radicata*, *S. rupestris*, *S. exigua* and *S. bryopteris*). Species of ferns known from the region number only 68. Majority of the members are either terrestrial or lithophytic and epiphytic growth is really meagre.
682. **Vasudeva, S.M. & Bir, S.S. 1993.** "Pteridophytic flora of Pachmarhi hills, Central India-II. (Keys to different taxa and fern families: Ophioglossaceae–Davalliaceae)". *Indian Fern J.* 10: 40–72. Abstract: The present paper deals with the ferns of Pachmarhi situated on Satpura mountains in Central India. Genera keys for segregation of various groups, families and genera of family Ophioglossaceae to Davalliaceae of Pachmarhi have been provided. Also keys for the separation of genera and species under each family and each genus respectively have been given.
683. **Vasudeva, S.M. & Bir, S.S. 1993.** "Pteridophytic flora of Pachmarhi hills, Central India-III. (Fern families: Glecheniaceae–Athyraceae)". *Indian Fern J.* 10: 113–138. Abstract: The present paper deals with the ferns of Pachmarhi situated on Satpura mountains in Central India. Genera keys for segregation of various groups, families and genera of family Glecheniaceae to Athyraceae of Pachmarhi have been provided. Also keys for the separation of genera and species under each family and each genus respectively have been given.
684. **Vasudeva, S.M. & Bir, S.S. 1993.** "Pteridophytic flora of Pachmarhi hills, Central India-IV. (Fern families: Thelypteridaceae–Marsileaceae)". *Indian Fern J.* 10: 172–205. Abstract: The present paper deals with the ferns of Pachmarhi situated on Satpura mountains in Central India. Genera keys for segregation of various groups, families and genera of family Thelypteridaceae to Marsileaceae of Pachmarhi have been provided. Also keys for the separation of genera and species under each family and each genus respectively have been given.
685. **Vasudeva, S.M. & Bir, S.S. 1994.** *Pteridophytic flora of Pachmarhi Tamia and Patal Kot in Central India.* Indian Fern Society Publication, Western Printers, Patiala.
686. **Verma, K.S. & Chile, S. 1992.** "Fungi in the medical college of the Jabalpur city and the allergenic behaviour of some species". *J. Indian Bot. Soc.* 71: 247–249. Abstract: The aeromycoflora of the intermural environment of the Allergy Ward of the Medical College

was undertaken, using culture plate exposure method. The survey was conducted from 1<sup>st</sup> May 1989 to 31<sup>st</sup> April 1990. Data of 3 spore groups have been isolated, out of those the major spore types were *Aspergillus* (35.64%), *Cladosporium* (32.13%), *Curvularia* (7.20%), *Penicillium* (6.5%), *Alternaria* (3.24%) and *Fusarium* (2.61%). Variations in the fungal populations in different months was also observed.

687. **Verma, K.S. & Khare, K. 1987.** "Study of air spora around Jabalpur University campus". *J. Econ. Taxon. Bot.* 11(1): 87–90. Abstract: The paper presents the result of aerobiological investigations carried out with the help of petri dishes. The air sampling is done for four consecutive months (from 1<sup>st</sup> September 1983 to 31<sup>st</sup> December 1983). This study of air spora a Jabalpur indicates thirty eight spore types in which thirty five belong to Deuteromycetes, two to Phycomycetes and one to Ascomycetes. Deuteromycetes contributed 92% of the total air spora in which highest percentage formed by *Aspergillus* (26.48%), followed by *Penicillium* (18.17%), *Curvularia* (16.05%), *Cladosporium* (7.37%), *Rhizopus* (6.90%), *Alternaria* (5.69%) *Helminthosporium* (4.67%) and *Trichoderma* (4.47%), respectively. Maximum population of micro-organisms appeared in the month of November, 84. More concentration was noted in outdoor air than indoor. There is a relative decline in spore concentration with the increasing heights.
688. **Verma, Pratibha, Singh, S.& Singh, R. 2011.** "Chaetomium: First report from some water bodies of Bhopal, Madhya Pradesh". *Indian J. Appl. Pure Biol.* 26(1): 115–117. Abstract: Three species of *Chaetomium* viz. *C. bostrychodes*, *C. crispatum* and *C. spirale* belonging to order Sphaeriales and group Ascomycotina were isolated for the first time from Sarangpani lake, Shahpura Lake & Lower Lake of Bhopal, Madhya Pradesh.
689. **Vyas, Deepak, Chaubey, Anjali & Dehariya, Poonam. 2014.** "Biodiversity of mushrooms in Patharia forest of Sagar (M.P.)- III". *Int. J. Biodiv. Cons.* 6(8): 600–607. Abstract: Patharia forest is situated on Vindhyan ranges at about 457.2-533.4 m above msl. It is mixed and dry deciduous type, dominated by *Acacia* species, *Butea monosperma*, *Tectona grandis* and ground flora consisting of *Biophytum sensitivum*, *Cassia tora*, *Cyanodon dactylon*, *Euphorbia geniculata*, *Heteropogon contortus*, *Lantana camara*, *Parthenium hysterophorus*, etc. During the period of July 2011-July 2013, wild mushrooms were collected from the Patharia forest and 18 mushrooms species belonging to 12 families were identified, viz., *Vascellum pratense*, *Lycoperdon pyriform*, *Coniphora puteana*, *Clitocybe geotropa*, *Ganoderma tsugae*, *Microglossum virde*, *Panaeolus sphinctrinus*, *Pleurotus cornucopiae*, *Fomes fomentarius*, *Tyromyces lacteus*, *Lenzites betulina*, *Hypholoma elongatum*, *Pholiota highlandensis*, *Serpula lacrymans*, *Tremella mesenterica*, *Lepista nuda*, *Collybia butyracea* and *Omphalina ericetorum*. Among the some are edible like *L. nuda* and *Clitopilus prunulus* which are used for culinary purposes; some are medicinal like *G. Tsugae*, *T. mesentrica*, *M. viride* which are used to prepare indigenous medicines using traditional techniques.

**New Discovery, New Reports, Rediscovery, Revision and Monograph**

690. **Balasure, K.M. 1966.** "Some plant records from the erstwhile Central Provinces Berar". *J. Bombay Nat. Hist. Soc.* 62: 455–462. Abstract: 42 plants belonging to 40 genera under 19 families has been recorded from the erstwhile Central Provinces Berar.
691. **Bhambie, S. & Sharma, R. 1965.** "A note on the occurrence of *Isoetes panchananii* at Pachmarhi in M.P.". *Lab. J. Sci. & Technol. India* 3: 71.
692. **Bhu, Indira, Goswami, H.K., Sharma, U.S. & Bajpai, A.K. 2001.** "*Isoetes fuchsii*: A new *Isoetes* from India". *Bionature* 21(1): 11–17. Abstract: Plants of aquatic weed quillwort are described from central India (Madhya Pradesh) possessing hitherto unknown features on megaspores. About 10% megaspores show spiny outgrowth(s) on a pyramidal area at the proximal face extending in wider perispore besides large round tubercles. Some of the megaspores also exhibit single large tubercles showing centrally placed "nipple" like projection and still other spores having an identically placed depression or pit on the tubercle. Apart from these features *I. fuchsii* sp. nov. is comparable to only *I. pantii* and *I. tuberculata*. *I. fuchsii* shows  $2n=60$  chromosomes in root tip mitosis.
693. **Bir, S.S. & Kumari, S. 1982.** "Additions to the papilionaceous flora of Pachmarhi hills, Madhya Pradesh". *Bull. Bot. Surv. India* 22(1-4): 45–50. Abstract: Thirty nine species of Papilionaceae are reported for the first time from Pachmarhi in Madhya Pradesh. This makes a total record of 99 species (103 taxa) of papilionaceous plants from the region. As many as 9 species, namely, *Argyrolobium flaccidum*, *Atylosia kulnensis*, *Desmodium floribundum*, *D. Maculatum*, *Flemingia fruticulosa*, *Phaseolus velutinus*, *Shuteria vestita*, *Sophora mollis* and *Teramnus mollis* are new records for Madhya Pradesh. This fully justifies the need for intensive floristic survey of the restricted regions for compilation of Flora of India.
694. **Chavan, S.Y. & Taur, R. 2017.** "On the occurrence of *Alysicarpus luteo-vexillatus* (Leguminosae: Papilionoideae) in Madhya Pradesh, India". *J. Econ. Taxon. Bot.* 41(3-4): 132–134. Abstract: *Alysicarpus luteo-vexillatus* Naik & Pokle, endemic to Maharashtra has been reported here for the first time for the flora of Madhya Pradesh from Bijasani Ghat and Gujarat border.
695. **Datt, B. & Dixit, S.K. 1984.** "On the occurrence of *Cymbopogon jwarancusa* (Jones) Schult. in Madhya Pradesh". *J. Econ. Taxon. Bot.* 5: 216. Abstract: *Cymbopogon jwarancusa* (Jones) Schult. has been reported for the first time for Madhya Pradesh from Raneh fall, Chhatarpur.
696. **Datt, B. & Dixit, S.K. 1985.** "Some interesting plant records for the flora of Madhya Pradesh". *Indian J. Forest.* 8(1): 73–74. Abstract: Three species, viz., *Amaranthus tenuifolius* Willd. (Amaranthaceae), *Polygonum minus* Huds. and *Rumex versicarius* L. (Polygonaceae)

have been reported for the first time from Madhya Pradesh. A brief description of each species alongwith up-to-date nomenclature, ecological notes, flowering and fruiting period and distribution is provided below.

697. **Datt, B. & Roy, G.P. 1983.** “*Ceratophyllum submersum* L. (Ceratophyllaceae)– A new record for Upper Gangetic plain”. *J. Econ Taxon. Bot.* 4: 305–307. Abstract: *Ceratophyllum submersum* L. has been reported for first time for Upper Gangetic plain from Chhatarpur, Madhya Pradesh.
698. **Datt, B. & Roy, G.P. 1984.** “Additions to Flora of Madhya Pradedh”. *J. Econ Taxon. Bot.* 5: 789–790. Abstract: Two taxa, viz., *Avena sterilis* L. subsp. *ludoviciana* (Dur.) Gill & Magne (Poaceae) and *Verbascum thapsus* L. (Scrophulariaceae) have been reported for the first time for the state of Madhya Pradesh from Chhatarpur district.
699. **Dixit, S.K. & Roy, G.P. 1992.** “Recollection of some little known taxa from Bastar district, Madhya Pradesh”. *J. Econ. Taxon. Bot.* 16(1): 185–192. Abstract: The paper presents 20 taxa of angiosperms collected after a lapse of long period.
700. **Dixit, S.K. & Roy, G.P. 1992.** “Additions to the flora of Bastar district, Madhya Pradesh”. *J. Econ. Taxon. Bot.* 16(2): 351–365. Abstract: The paper presents an account of 187 species belonging to 67 families which have not been earlier reported from Bastar district of Madhya Pradesh.
701. **Duthie, J. F. 1902.** “Description of some new species of orchids from North west and Central India”. *J. Asiat. Soc. Bengal, N.S. II.* 71: 37–45.
702. **Dutta, A. & Ansari, A.A. 1979.** “*Cuscuta campestris* Yuncker (Cucutaceae), a new pest of economic crops in India– Its distributional and host record”. *Bull. Bot. Surv. India* 21(1-4): 202–203. Abstract: It is recorded that *Cuscuta campestris* Yuncker occurring in Chhatisgarh district is found parasitizing on cultivated crops of *Linum usitatissimum* L. (Linseed) and in Nilgiris, it parasiting *Stachytarpheta indica* (L.) Vahl.. These are the two new distributional records of the parasite for central and southern India and also for the hosts hitherto unreported. Previously this species is known from Maharashtra, Tamil Nadu and West Bengal.
703. **Garg, Arti & Tiwari, Arjun Prasad. 2018.** “Three new records of angiosperms for Madhya Pradesh”. *Indian J. Forest.* 41(1): 13–15. Abstract: *Portulaca tuberosa* Roxb., *Solanum diphyllum* L. and *Lippia alba* (Mill.) N.E. Br. are reported from the state of Madhya Pradesh. Detailed description, ecological observations and photographs are provided.
704. **Goswami, H.K. & Arya, B.S. 1970.** “A new species of *Isoetes* from Narsingharh, Madhya Pradesh”. *J. Indian Bot. Soc.* 49: 30–37. Abstract: A new species of *Isoetes* viz., *I. pantii* has been described and illustrated from Narsingharh, Madhya Pradesh.
705. **Govekar, R.S., Kallaje, R.S. & Sardesai, M.M. 2014.** “Addition of bamboos for

- Chhattisgarh and Maharashtra". *Indian Forester* 140(8): 826–827. Abstract: Two species of bamboo namely *Bambusa tulda* Roxb. from Chhattisgarh & Maharashtra and *Schizostachyum pergracile* (Munro) R.B. Majumdar from Maharashtra has been reported for the first time from the states.
706. **Hemadri, K. 1971.** "Two new species of Fabaceae from India". *Indian Forester* 97(1): 65–69. Abstract: *Alysicarpus vasavadae* Hemadri sp. nov. from Maharashtra, Madhya Pradesh and Mysore state and *Smithia agharkarii* Hemadri sp. nov. from Maharashtra are described and illustrated.
707. **Henry, H.N. & Balakrishnan, N.P. 1961.** "A new species of *Staurogyne* from central India". *Bull. Bot. Surv. India* 3(2): 205–206. Abstract: *Staurogyne perpusilla* Henry & Bal., spec. nov. (Acanthaceae) allied to *S. polybotryae* (Nees) O. Kuntze, collected from Bastar district, Madhya Pradesh, Central India, is described with illustration.
708. **Gaikwad, S.V., Mujaffar, S., Tiwari, A.P., Gurav, R.V. & Uikey 2017.** "*Mucuna nigricans* (Leguminosae: Papilionoideae): An addition to Madhya Pradesh state, India". *J. Econ. Taxon. Bot.* 41(3-4): 126–128. Abstract: *Mucuna nigricans* (Lour.) Steud. has been reported for the first time for the flora of Madhya Pradesh from Supkhar, Kanha Tiger Reserve, Mandla district.
709. **Jain, A.K. & Das, R.R. 1986.** "*Commiphora mukul* Linn. (Burseraceae) from Chambal ravines: A new record for Madhya Pradesh". *Geobios, New Rep.* 5(1): 79–80.
710. **Jain, S.P. & Chitaranishi, T. 2006.** "*Curculigo trichocarpa* (Wight) Bennet & Raizada". *J. Non-Timber Forest Prod.* 13(1): 33–34. Abstract: *Curculigo trichocarpa* (Wight) Bennet & Raizada (Hypoxidaceae) is reported for the first time for Madhya Pradesh from Kukshi, Dhar district and described with illustrations.
711. **Jain, S.P., Singh, S.C., Srivastava, G.N., Ranjan, V. & Singh, J. 1999.** "*Eupatorium adenophorum* Spreng.— A new record for Madhya Pradesh". *J. Bombay Nat. Hist. Soc.* 95(3): 542. Abstract: *Eupatorium adenophorum* Spreng. has been reported for the first time for the flora of Madhya Pradesh from Torenga forest, Raipur district. Earlier this species was reported from northeastern India, Tamil Nadu, Uttar Pradesh and Kerala.
712. **Jha, A.K. & Khanna, K.K. 2002.** "Some new plant records for Madhya Pradesh". *J. Econ. Taxon. Bot.* 26(3): 619–621. Abstract: *Clematis wightiana* Wallich ex Wight & Arn. (Ranunculaceae), *Oncoba spinosa* Forssk. (Bixaceae), *Stachytarpheta dichotoma* (Ruiz & Pav.) Vahl (Verbenaceae) and *Viscum angulatum* Heyne (Loranthaceae) have been reported as new records for the flora of erstwhile Madhya Pradesh.
713. **Joshi, Bhavana. 2015.** "Two additional angiosperms for the flora of Madhya Pradesh". *Indian J. Forest.* 38(3): 275–276. Abstract: *Acmella uliginosa* (Sw.) Cass. And *Solanum viarum* Dunal are recorded as additions to the flora of Madhya Pradesh from Dhanpuri coal mines, Shahdol district and Achanakmar-Amarkantak Biosphere Reserve, respectively.



714. **Kaushik, J.P. 1969.** "A note on Commelinaceae of Northern M.P.". *J. Bombay Nat. Hist. Soc.* 66: 409–410. Abstract: 11 species under 3 genera has been reported for the first time from northern M.P.
715. **Khandel, A.K., Ganguly, S. & Bajaj, A. 2012.** "*Gloriosa superba* L. (Glory lily) spotted for the first time in vegetation of Pachmarhi Biosphere Reserve (Hoshangabad district), Central India". *Int. J. Pharm. Life Sci.* 3(6): 1725–1732. Abstract: *Gloriosa superba* Linn. (Glory lily), is a medicinal plant belongs to the family Liliaceae. It is one of the important species which is used for several ethno-medicinal purposes by tribes of PBR. The present paper first time deals with the, new record of distributions of *Gloriosa superba* L. species in six localities, namely Tawa nagar (Near Tawa Reservoir), Badkachhar, Chhotianhoni, Dokrikheda, Panarpani and Matkuli of Hoshangabad Districts in PBR. A research study was conducted from December 2010 to November 2011 in various seasons to record & encounter the *Gloriosa superba* L. distributed in various localities of PBR & use by tribal communities & traditional healers. PBR is the most luxuriant forest and rich in medicinal plant resources. The forest area is dominated by a number of tribes such as Koorku, Bharia, Gond and Mawasi who depends solely on their surrounding forests for most of their requirements from food to medicines.
716. **Khanna, K.K. 1989.** "A few taxa of Rubiaceae new to Madhya Pradesh". *J. Econ. Taxon. Bot.* 13(2): 398–400. Abstract: *Hedyotis verticillata* (Linn.) Lamk., *Ixora cuneifolia* Roxb., *Meyna spinosa* Link, *Neanotis decipiens* (Hook. f.) Lewis, *N. ingrata* (Wall. ex Hook. f.) Lewis, *Oldenlandia corymbosa* var. *linearis* (DC.) Verde. and *Wendlandia coriacea* DC. are reported as new records for flora of Madhya Pradesh.
717. **Khanna, K.K. 1990.** "*Meyna velutina* Robyns (Rubiaceae)– A new record for India". *J. Econ. Taxon. Bot.* 14: 793.
718. **Khanna, K.K. 2000.** "*Murdannia simplex* (Vahl) Brenan (Commelinaceae), a new record for Madhya Pradesh". *J. Econ. Taxon. Bot.* 24(1): 171–172. Abstract: *Murdannia simplex* (Vahl) Brenan (Commelinaceae) has been reported as a new record for the flora of Madhya Pradesh from Sagar.
719. **Khanna, K.K. & Jha, A.K. 2005.** "Some new records of angiosperms for Chhattisgarh". *Ann. Forest.* 13(2): 299–303. Abstract: The paper deals with an account of eleven species of angiosperms, viz., *Achyranthes bidentata* Blume, *Arthraxon echinatus* (Nees) Hochst., *Curculigo crassifolia* (Baker) Hook.f., *Dactyloctenium scindicum* Boiss., *Ficus talboti* King, *Flemingia bracteata* (Roxb.) Wight, *Lindernia multiflora* (Roxb.) Mukherjee, *Piper longum* L., *Polygonum serrulatum* Lag., *Pseudoraphis brunoniana* Griff., *Trewia nudiflora* L. which are new records for Chhattisgarh. The correct nomenclature, brief description, phenology, habitat, locality and collection number of each species have been provided in the present paper.

720. **Khanna, K.K. & Kumar, A. 2000.** "Additions to the taxa of angiosperms: Flora of Madhya Pradesh Vol. II". *J. Econ. Taxon. Bot.* 24(1): 177–180. Abstract: Thirty two taxa of angiosperms not included in the flora of Madhya Pradesh Vol. II have been listed here. Their taxonomic citation and distribution have been provided.
721. **Khanna, K.K. & Kumar, A. 2001.** "Third list of taxa of angiosperms not included in the Flora of Madhya Pradesh- Vol. I". *J. Econ. Taxon. Bot.* 25(3): 517–522. Abstract: Fifty three taxa belonging to 17 families of angiosperms are communicated in the present paper as additions to the Flora of Madhya Pradesh- Vol. I.
722. **Khanna, K.K. & Kumar, A. 2001.** "*Flemingia stricta* Roxb. subsp. *pteropus* (Baker) K.K. Khanna & Anand Kumar comb et stat nov. and its occurrence in India". *Indian J. Forest.* 24(2): 223–225. Abstract: On the basis of detailed observation, *Flemingia stricta* Roxb. var. *pteropus* Baker has been raised to the status of a subspecies, viz., *Flemingia stricta* Roxb. subsp. *pteropus* (Baker) K.K. Khanna & Anand Kumar. Further, the taxon is also reported here as a new record for India from Madhya Pradesh and Odisha.
723. **Khanna, K.K. & Kumar, A. 2001.** "A new variety of *Trichodesma indicum* (L.) R. Br. ex Lehm. (Boraginaceae) from Madhya Pradesh, India". *Indian J. Forest.* 24(2): 226–228. Abstract: A new variety *Trichodesma indicum* (L.) R. Br. ex Lehm. var. *betulense* K.K. Khanna & Anand Kumar allied to *T. indicum* var. *amplexicaule* (Roth) Cook (Boraginaceae) is reported from Betul district of Madhya Pradesh, India. Latin diagnosis, detailed description and illustrations are provided.
724. **Khanna, K.K. & Kumar, A. 2001.** "*Eriocaulon heterolepis* Steud. (Eriocaulaceae)– A new record for Madhya Pradesh". *Indian J. Forest.* 24(3): 377–378. Abstract: *Eriocaulon heterolepis* Steud. (Eriocaulaceae) has been reported as a new record for the Flora of Madhya Pradesh from Panna. Earlier this species was reported from Goa, Karnataka, Kerala and Maharashtra.
725. **Khanna, K.K. & Kumar, A. 2002.** "Recollection of an endemic plant, *Ficus cupulata* Haines from type locality (Pachmarhi Biosphere Reserve)". *Bull. Bot. Surv. India* 44(1-4): 145–146. Abstract: *Ficus cupulata* Haines, an endemic plant, has been recollected from Pachmarhi Biosphere Reserve, Hoshangabad district, Madhya Pradesh (type locality) after a lapse of 86 years.
726. **Khanna, K.K. & Kumar, A. 2007.** "Some additional plants for Panchmarhi Biosphere Reserve (Madhya Pradesh)". *Indian J. Forest.* 30(2): 215–220. Abstract: The paper enumerates 35 taxa as new record for the flora of Pachmarhi Biosphere Reserve based on authors' own collections. Correct nomenclature with citation, family name, brief distinguishing characters, abundance, habitat, exact locality of occurrence, field number and flowering and fruiting period of each taxon has been presented. The findings are significant in view of the Article-7 of CBD and Clause-36 of Biological Diversity Bill 2000.

727. **Khanna, K. K. & Sikarwar, R.L.S. 2004.** "Chlorophytum borivilianum Sant. & Fernand. (Liliaceae) – A new record for Madhya Pradesh". *Phytotaxonomy* 4: 74–75. Abstract: *Chlorophytum borivilianum* Sant. & Fernand. has been reported as a new record for the flora of Madhya Pradesh from I.I.F.M. campus, Bhopal, thus extending its distribution from Maharashtra, Gujarat and Rajasthan to central India.
728. **Khanna, K.K., Kumar, A. & Jha, A.K. 2005.** "On the occurrence of monotypic genera (angiosperms) in Chhattisgarh and Madhya Pradesh". *J. Econ. Taxon. Bot.* 29(2): 470–475. Abstract: An account of 53 monotypic genera of angiosperms occurring in Chhattisgarh and Madhya Pradesh has been reported in the present paper.
729. **Khanna, K.K., Dubey, P.C., Sikarwar, R.L.S. & Tiwari, A. 2009.** "Some angiospermic plants new to Central India". *J. Econ. Taxon. Bot.* 33(4): 834–836. Abstract: Six species of angiosperms, viz., *Citrullus colocynthis* (L.) Schrad. ex Eckl. & Zeyh., *Curcuma caesia* Roxb., *Pedaliium murex* L., *Rauvolfia tetraphylla* L., *Solanum myriacanthum* Dunal and *Zingiber zerumbet* (L.) Sm., have been reported as new records for central India.
730. **Kotia, A., Kumar, P., Tiwari, U.L., Prasad, A.N. & Rawat, G.S. 2010.** "New distribution records of some orchids from Chhattisgarh state (Kanger Valley National Park), India". *Indian Forester* 136(3): 354–358. Abstract: *Dendrobium peguanum* Lindl. and *Liparis deflexa* J.D. Hook. are two orchid species which are reported for the first time from Chhattisgarh state (Kanger Valley National Park) or we can say past Madhya Pradesh state. The present article deals with the description and distribution map of the species.
731. **Krishnamurthy, G., Bisen, R. & Homkar, U. 2015.** "Yellow flowered *Semal* (*Bombaxceiba* L.): A rare mutant tree observed at Gwarighat, Jabalpur, Madhya Pradesh". *J. Trop. Forest.* 31(3): 69–71. Abstract: Normally, the flower colour of *Bombaxceiba* is pink to light red, therefore it is called red cotton tree. Few rare mutant *Semal* tree was observed at Gwarighat, Jabalpur whose flower colour is yellow. Morphologically, both yellow and red flowered trees are same, only colour of petals is different. These yellow flower coloured tree are not producing seed because of heavy biotic pressure and so, its natural regeneration is not established.
732. **Kumar, A. 1982.** "Additions to the Flora of Bhopal". *Bull. Bot. Soc. Univ. Saugar* 29: 52. Abstract: Two interesting species viz., *Sesbania bispinosa* (Jacq.) W.F. Wight and *Elytrophorus spicatus* (Willd.) A. Camus were collected, which were hitherto unrecorded from Bhopal along with their citation, brief description and habitat. The specimens have been deposited in the herbarium of the Botanical Survey of India, Central Circle, Allahabad (BSA).
733. **Kumar, A. 1993.** "New distributional records of some angiosperms from Madhya Pradesh". *J. Econ. Taxon. Bot.* 17(1): 143–145. Abstract: 5 species and 1 variety of angiosperms are reported in the paper as new distributional records for the flora of Madhya Pradesh.

734. **Kumar, A. & Khanna, K.K. 2000.** "A note on the occurrence of *Microchloa indica* (Linn. f.) P. Beauv. (Poaceae) in Madhya Pradesh". *J. Econ. Taxon. Bot.* 24(1): 210–212. Abstract: *Microchloa indica* (Linn. f.) P. Beauv. (Poaceae), a rare and interesting grass, is being reported here for the first time for Madhya Pradesh from Betul district.
735. **Kumar, A. & Khanna, K.K. 2018.** "*Stylosanthes hamata* (L.) Taub. (Fabaceae)– A new record for India". *Indian Forester* 144(5): 485–486. Abstract: *Stylosanthes hamata* (L.) Taub. has been reported for the first time for Indian flora from Malamjhiri, Betul district, Madhya Pradesh.
736. **Kumar, A. & Lal, J. 1995.** "Taxa of angiosperms not included in the flora of Madhya Pradesh- Volume I". *Fl. & Fauna* 1(2): 185–195. Abstract: The paper includes 200 taxa (178 species, 2 subspecies and 20 varieties) belonging to 137 genera and 38 families of angiosperms, not included in the Flora of Madhya Pradesh- Volume I (Eds., D.M. Verma et al. 1993). Full citation and distribution of each taxa has been provided.
737. **Kumar, A. & Lal, J. 1998.** "Second list of taxa of angiosperms not included in the flora of Madhya Pradesh– Vol. I". *J. Econ. Taxon. Bot.* 22(3): 563–570. Abstract: In the present paper 105 taxa of angiosperms belonging to 22 families have been enumerated, as these are not included in the Flora of Madhya Pradesh Vol. I (Eds. Verma et al. 1993). Out of these 2 species, viz. *Desmodium elegans* DC. and *Uraria neglecta* Prain (Fabaceae) are new records for the Flora of Madhya Pradesh.
738. **Kumar, V. & Datt, B. 2006.** "*Eryngium foetidum* L.: An overlooked species for erstwhile Madhya Pradesh". *J. Econ. Taxon. Bot.* 30(2): 303–304. Abstract: A rare and threatened species *Eryngium foetidum* L. has been reported for the first time from Surguja district in erstwhile Madhya Pradesh, now in Chhattisgarh.
739. **Lal, Brij & Datt, B. 1993.** "*Epipactis veratrifolia* Boiss.– A new record for the flora of Madhya Pradesh". *J. Indian Bot. Soc.* 72: 319–320. Abstract: *Epipactis veratrifolia* Boiss. (Orchidaceae), which is so far known in India from Himalayas and peninsular India, is reported for the first time from Madhya Pradesh.
740. **Lal, Jagdish, Kumar, A. & Saran, R. 1982.** "New records of three species and one variety of the genus *Cuscuta* L. (Cuscutaceae) from Madhya Pradesh, India". *J. Econ. Taxon. Bot.* 3: 581–583. Abstract: *Cuscuta australis* R. Br., *C. campestris* Yuncker, *C. chinensis* Lamk. var. *cillaris* (Hohen.) Engel. and *C. santapau* Banerji et Das are being recorded here as new to Madhya Pradesh.
741. **Lata, K., Singh, J. & Narain, S. 2012.** "New distributional record of *Blumea sonbhadrensis* Narain, Lata et Juhi (Asteraceae) for central India". *Phytotaxonomy* 12: 98–99. Abstract: *Blumea sonbhadrensis* Narain, Lata et Juhi (Asteraceae), collected from Surguja district of Chhattisgarh and Palamau district of Jharkhand is the first report of occurrence of this species for central India. This species is distinguished from its allied species *Blumea*

*mollis* (D. Don) Merr. in having densely pilose habit of the plant, acuminate leaves, glabrous corolla lobes and style as long as corolla lobes.

742. **Maheshwari, J. K. & Singh, V. 1971.** "The genus *Craterostigma* Hochst. (Scrophulariaceae) in India". *Bull. Bot. Surv. India* 13(1&2): 11–12. Abstract: *Craterostigma plantagineum* Hochst. (Scrophulariaceae) collected from Shivpuri, M.P. is recorded for the first time from India. The species was known earlier from tropical Africa and Arabia only. It is, therefore, described in detail together with notes on its ecology and distribution, variation and affinities, and its importance in the folklore of Shivpuri, M.P.
743. **Meena, K.L. 2013.** "*Alternanthera tenella* Colla: A new record to the flora of Madhya Pradesh". *J. Econ. Taxon. Bot.* 37(3): 587–589. Abstract: *Alternanthera tenella* Colla (Amaranthaceae) collected from village Hakrana and Kesarpura of district Neemuch for the first time in Madhya Pradesh. The detailed description, up to date nomenclature, time of flowering and fruiting, ecological notes, illustrations of this species have been presented.
744. **Meena, K.L. 2014.** "*Bergia aestivosa* Wight & Arn.: A new record to the flora of Malwa region, Madhya Pradesh". *J. Econ. Taxon. Bot.* 38(1): 145–147. Abstract: *Bergia aestivosa* Wight & Arn. (Elatinaceae) collected from villages Sarwania and Bambori, for the first time from the Malwa region of Madhya Pradesh state. The morphological features, up to date nomenclature, time of flowering-fruiting, ecological notes and photographs of this species have been presented in this paper.
745. **Meena, K.L. 2014.** "*Lagerstroemia microcarpa* Wight: A new additions to the flora of Madhya Pradesh". *J. Econ. Taxon. Bot.* 38(3-4): 546–548. Abstract: *Lagerstroemia microcarpa* Wight (Lythraceae) collected from village Patri of tehsil Sailana district Ratlam, for the first time from the Madhya Pradesh state. The morphological features, up to date nomenclature, time of flowering-fruiting, ecological notes and photographs of this species have been presented in this paper.
746. **Meena, K.L. 2014.** "*Soliva* Ruiz & Pavon: A new generic record to the flora of Malwa region, India". *Phytotaxonomy* 14: 152–154. Abstract: The genus *Soliva* Ruiz & Pavon family Asteraceae, has so far not been reported from Malwa region and thus is being reported for the first time. In India, this genus is represented by only one species namely *Soliva anthemifolia* (Juss.) R. Br. The detailed description, upto date nomenclature, time of flowering-fruiting, ecological notes and photographs of the species have been presented in this paper.
747. **Meena, K.L. 2015.** "*Solanum viarum* Dunal (Solanaceae): A new record to the flora of Madhya Pradesh, India". *J. Econ. Taxon. Bot.* 39(1): 29–31. Abstract: *Solanum viarum* Dunal (Solanaceae) collected from Pachmarhi Biosphere Reserve, for the first time from the Madhya Pradesh state. The morphological features, upto date nomenclature, time

of flowering-fruiting, ecological notes and photographs of this species have been presented in this paper.

748. **Meena, K.L. 2015.** “*Physalis maxima* Miller: A new addition to the flora of Madhya Pradesh, India”. *J. Econ. Taxon. Bot.* 39(1): 90–93. Abstract: *Physalis minima* Miller (Solanaceae) collected from district Neemuch, for the first time from the Madhya Pradesh state. The morphological features, up to date nomenclature, time of flowering-fruiting, ecological notes and photographs of this species have been presented in this paper.
749. **Meena, K.L. 2015.** “*Habenaria longicorniculata* J. Graham. (Orchidaceae): An addition to the flora of Madhya Pradesh, India”. *J. Econ. Taxon. Bot.* 39(2): 290–293. Abstract: *Habenaria longicorniculata* J. Graham. (Orchidaceae) has been reported from Pachmarhi Biosphere Reserve, Madhya Pradesh, India for the first time. Based on critical examination of specimens, it has been identified as *Hygrophila ringens*(L.) Steud., the species hitherto unreported from Madhya Pradesh. The paper also envisages brief citation, description, phonological data and photographs of the paper.
750. **Meena, K.L. 2017.** “*Dipcadi saxorum* (Asparagaceae): A new record to the flora of Madhya Pradesh, India”. *J. Econ. Taxon. Bot.* 41(1-2): 47–49. Abstract: *Dipcadi saxorum* Blatt. (Asparagaceae) has been reported for the first time for Madhya Pradesh from Pachmarhi Biosphere Reserve.
751. **Meena, K.L. & Meena, S.L. 2015.** “*Hygrophila ringens* (L.) Steud. (Acanthaceae): A new record to the flora of Madhya Pradesh from Malwa region, India”. *J. Econ. Taxon. Bot.* 39(2): 294–296. Abstract: *Hygrophila ringens* (L.) Steud. (Acanthaceae), has so far not been reported from Malwa region. During inventorisation in the study area, the senior author has collected interesting specimens of *Hygrophila*. Based on critical examination of specimens, it has been identified as *Hygrophila ringens* (L.) Steud., the species hitherto unreported from Malwa region. The paper also envisages brief citation, description, phonological data and illustrations of the species.
752. **Mehrotra, M.D., Sharma, G.S., Dhungana, H.N. & Soni, K.K. 1985.** “Some new host records and additions to fungi of India”. *Indian Forester* 111(7): 533–537. Abstract: Thirty eight pathogenic fungi were recorded during the study of forest diseases in Madhya Pradesh, Assam and Meghalaya states of which 18 are recorded for the first time in India and for the rest of them, the hosts are new records.
753. **Mujaffar, S. & Chandore, A.N. 2015.** “*Eleocharis lankana* T. Koyama subsp. *mahamadii* Wadood Khan (Cyperaceae)– A new record for Madhya Pradesh state (India)”. *Indian Forester* 141(4): 471–472. Abstract: *Eleocharis lankana* T. Koyama subsp. *mahamadii* Wadood Khan has been reported for the first time for the flora of Madhya Pradesh from Kalaakhar, Hoshangabad district.
754. **Mujaffar, S. & Mehra, S.S. 2011.** “*Tinospora sinensis* (Lour) Merr. (Menispermaceae) a

- new record for Madhya Pradesh state red listed medicinal plants". *J. Trop. Forest.* 27(2): 61–63. Abstract: The paper deals with the occurrence of *Tinospora sinensis* (Lour.) Merr. as a new record for Madhya Pradesh from Awalia forest village and nearby Khedi village of Khandwa Forest Division along with description.
755. **Mujaffar, S., Moinuddin, S. & Mustakim, S. 2014.** "*Tinospora maqsoodiana* (Menispermaceae), a new species from Madhya Pradesh, India". *Indian Forester* 140(5): 528–530. Abstract: A new species of *Tinospora* (Minispermaceae), *T. maqsoodiana* Mujaffar, Moinuddin & Mustakim from Babangaon and Tirandag village, Khandwa district of Madhya Pradesh, India is described and illustrated.
756. **Mujaffar, S., Qureshi, N. & Yasin, C.M. 2014.** "*Barleria acanthoides* Vahl. (Acanthaceae)– A new record to the flora of Madhya Pradesh". *J. Econ. Taxon. Bot.* 38(1): 30–32. Abstract: The genus *Barleria* is represented by 26 species in India; while Khanna et al. reported 9 species (excluding *Barleria acanthoides*) of it from Madhya Pradesh. *Barleria acanthoides* has been reported from Gujarat, Haryana, Maharashtra, Punjab and Rajasthan states of India. The present communication facilitates to include Madhya Pradesh also in the list.
757. **Mujaffar, S., Shukla, S.K. & Mishra, S. 2013.** "Some angiospermic plants new to Central India". *Sci. Res. Report* 3(2): 102–105.
758. **Mujaffar, S., Yasin, C.M. & Solanki, C.M. 2013.** "A new variety of *Tinospora cordifolia* (Willd.) Miers (Menispermaceae) from Madhya Pradesh". *Indian Forester* 139(2): 175–177. Abstract: A new variety of *Tinospora cordifolia* (Willd.) Miers ex Hook.f. & Thoms. viz., *Tinospora cordifolia* var. *congesta* has been collected and reported for the flora of Madhya Pradesh from Khandwa, near Abna River. The variety differs from the typical variety in having lens shaped lenticels, compact pseudoracemes, female bracts ovate and endocarp rounded, grey with depression on ventral surface.
759. **Mukherjee, A.K. 1984.** "An endemic *Dioscorea* rediscovered". *J. Econ. Taxon. Bot.* 5: 205. Abstract: An endemic *Dioscorea*, *D. wightii* Hook.f. has been reported from different districts of Madhya Pradesh and Uttar Pradesh. These recent collections indicate that the Madhya Pradesh habitat is more suitable for the growth of the species than that of the type locality in Tamil Nadu.
760. **Murti, K. 1972.** "New records of two taxa for Madhya Pradesh". *Bull. Bot. Surv. India* 14(1-4): 187. Abstract: Two new taxa, viz., *Stylidium kunthii* Wall. ex DC. and *Chirita bifolia* D. Don has been recorded for the first time for the state of Madhya Pradesh from Bilaspur and Pachmarhi plateau respectively.
761. **Murti, S.K. 1979.** "Two new records of species for Madhya Pradesh". *Bull. Bot. Surv. India* 21(1-4): 183–186. Abstract: The paper deals with two species viz., *Althea ludwigia* L. and *Lepidagathis purpuricaulis* Wall. ex Nees have been reported for the first time

from Madhya Pradesh. Diagram of habit and features of diagnostic value have been provided since they are not available anywhere.

762. **Murti, S.K. 1982.** “*Arundinella setosa* Trin. var. *lanifera* C.E.C. Fischer- An interesting record from Madhya Pradesh”. *Bull. Bot. Surv. India* 24(1-4): 232. Abstract: *Arundinella setosa* Trin. var. *lanifera* C.E.C. Fischer, endemic to south India has been reported from Madai, Bilaspur district of Madhya Pradesh. Thus this species extends its range of distribution to north.
763. **Naithani, H.B. & Pal, R.C. 2006.** “Notes on the occurrence of bamboo, *Gigantochloa albociliata* (Munro) Kurz from Bastar, Chhattisgarh, India”. *Indian Forester* 132(12): 1591–1597. Abstract: *Gigantochloa albociliata* (Munro) Kurz, a native of Myanmar and Thailand has now been reported from the wild from Kanger Valley Wildlife Sanctuary, Bastar (Jagdalpur), Chhattisgarh. It has gregariously flowered in Bastar, 1960. It can easily recognised by its narrow white ciliate spikelets, and having long ligule of culm sheaths. It is often confused with *Gigantochloa nigrociliata* (Buse) Munro, a species endemic to Indonesia and Thailand and having long, black ciliate spikelets and culm sheaths having narrow ligule, and raised rounded auricles ending in curved sheath extension.
764. **Naithani, H.B. & Pal, R.C. 2010.** “*Gigantochloa bastareana* – A new species of bamboo from Chhattisgarh, India”. *Indian Forester* 136(9): 1276–1277. Abstract: A new species of *Gigantochloa* viz., *G. Bastareana* allied to *G. Albociliata* (Munro) Kurz has been described and illustrated from Dandak Gupha, Kanger Valley National Park, Bastar, Chhattisgarh.
765. **Naithani, H.B. & Raizada, M.B. 1977.** “New record of some Cyperaceae taxa in India”. *Indian Forester* 103(6): 411–424. Abstract: The paper presents a new combination, i.e., *Fimbristylis falcata* (Vahl) Kunth var. *latifolia* (Kunth) Naithani & Raizada and new records of 13 taxa of sedges (Cyperaceae) in India, viz., *Cyperus sanguinolentus* Vahl subsp. *melanocephalus* (Miq.) A. Kern., *Fimbristylis falcata* Kunth var. *latifolia* (Kunth) Naithani & Raizada, comb. nov., *Scleria corymbosa* Roxb. for North India; *Cyperus uniolooides* R. Br., *Fimbristylis salbundia* (Nees) Kunth, *F. stolonifera* C.B. Clarke for central India; *Scleria biflora* Roxb. for Madhya Pradesh; *Cyperus melanospermus* (Nees) Valck.Sur., *Fimbristylis pierotii* Miq., *Scleria rugosa* R. Br. for Orissa; *Cyperus pulchellus* R. Br. for Orissa and Gujarat; *Fimbristylis sieberiana* Kunth for northern and southern India and *F. velata* R. Br. for Karnataka. Notes on synonymy, short description, distribution and distinction from allied species are provided. Species are arranged alphabetically. All quoted specimens are deposited at DD.
766. **Narayanaswami, V.1941.** “A new *Gymnosporia* from Bastar state, India”. *J. Indian Bot. Soc.* 20: 191–193. Abstract: A new *Gymnosporia* viz., *G. bailadillana* Narayanaswami et Mooney has been described and illustrated from Bailadilla hills, Bastar state, India.



767. **Nath, V., Harsh, N.S.K., Tivari, C.K. & Rehill, P.S. 1988.** “*Albizia procera* Benth., a new host for *Cercospora albiziae*”. *Indian Forester* 114(1): 46–47. Abstract: *Cercospora albiziae* Kar & Mandal has been described on a new host *Albizia procera* from Jabalpur, Madhya Pradesh.
768. **Painuli, R.M. & Maheshwari, J.K. 1993.** “*Craterostigma plantagineum* Hochst.— A rare and endangered species from Madhya Pradesh”. *J. Econ. Taxon. Bot.* 17(3): 749–750. Abstract: A rare and endangered species, *Craterostigma plantagineum* Hochst. of the family Scrophulariaceae has been collected for the time for Madhya Pradesh from Chanderi Forest Division in Guna district.
769. **Painuli, R.M. & Sikarwar, R.L.S. 1993.** “*Stylosanthes fruticosa* (Retz.) Alston (Fabaceae)— An addition to the flora of Madhya Pradesh”. *Indian J. Forest.* 16(1): 83–84. Abstract: *Stylosanthes fruticosa* (Retz.) Alston (Fabaceae) has been recorded first time from Madhya Pradesh from Paradam, Dewas district. Earlier this species was reported from Karnataka, Tamil Nadu and Odisha.
770. **Pal, M. 2012.** “Extended distribution of *Ipomoea parasitica* (Kunth) G. Don (Convolvulaceae) in Andhra Pradesh and Chhattisgarh”. *Indian J. Forest.* 35(2): 235–236. Abstract: *Ipomoea parasitica* (Kunth) G. Don (Convolvulaceae) is first time reported from Andhra Pradesh (Araku Valley, Visakhapatnam district) and Chhattisgarh (Bastar district). In India, it was known to be present in Karnataka, Kerala, and Tamil Nadu as reported in 2002. A brief description, illustration and other relevant notes are provided.
771. **Pandey, H.N. 1982.** “A rare grass from Sagar (M.P.)”. *Indian J. Forest.* 5(2): 162–163. Abstract: *Themeda quadrivalvis* (Linn.) O. Ktze. var. *helferi* (Hack.) Bor has been recorded for the first time for Madhya Pradesh from Parsoria village of Sagar. Earlier this species was recorded from Andaman Islands.
772. **Panigrahi, G. & Tiwari, S.D.N. 1975.** “Rediscovery of *Nogra filicaulis* after one hundred years”. *Kew Bull.* 30: 459–461.
773. **Pant, P.C. & Hanfi, M.I. 1975.** “A note on *Indigofera angulosa* Edgew. From Madhya Pradesh”. *Bull. Bot. Surv. India* 17(1-4): 179. Abstract: *Indigofera angulosa* Edgew. has been reported for the first time for Madhya Pradesh from Rajnandgaon district.
774. **Pant, P.C. & Hanfi, M.I. 1986.** “*Dalzelia zeylanica* (Gardn.) Wight— A new distributional record for Madhya Pradesh”. *Indian J. Forest.* 9(2): 175. Abstract: *Dalzelia zeylanica* (Gardn.) Wight has been recorded first time for state of Madhya Pradesh from Kabra nalla Bori, Hoshangabad district.
775. **Prasad, R. & Lal, Jagdish. 1984.** “Genus *Elatine* L. (Elatinaceae)— A new record for Madhya Pradesh”. *J. Econ Taxon. Bot.* 5: 981. Abstract: *Elatine ambigua* Wight has been recorded for the first time for Madhya Pradesh from Morena district, earlier reported from Western Peninsula and Gujarat.

776. **Prasad, V.P. 2016.** "*Fimbristylis merrillii* (Cyperaceae) – A new distribution record for Eastern and Central India". *Nelumbo* 58: 111–113. Abstract: *Fimbristylis merrillii* J. Kern is reported for the first time from eastern and central India based on the herbarium specimens from West Bengal and Madhya Pradesh respectively. Also extended distribution in Telangana state is reported.
777. **Roy, G.P. & Dixit, S.K. 1984.** "*Crassocephalum crepidioides* (Benth.) S. Moore, (Asteraceae)– A new record for Madhya Pradesh". *J. Econ. Taxon. Bot.* 5: 279–280. Abstract: *Crassocephalum crepidioides* (Benth.) S. Moore has been reported for the first time for Madhya Pradesh from Bilaspur and Bastar districts.
778. **Roy, G.P. & Dixit, S.K. 1985.** "Addition of two new taxa to the flora of Madhya Pradesh". *J. Econ. Taxon. Bot.* 6: 237–238. Abstract: The paper present two taxa i.e. *Ficus heterophylla* L. f. and *Ficus lanceolata* Roxb. which are determined as new records for the recognized state Madhya Pradesh.
779. **Roy, G.P. & Dixit, S.K. 1987.** "Addition to the flora of Madhya Pradesh-II (some new distributional record)". *J. Econ. Taxon. Bot.* 11(1): 173–176. Abstract: The present paper is an account of seven taxa of angiosperms i.e. *Decaschistia crotonifolia* Wt. & Arn., *Lobelia nicotianifolia* Roth ex Roem. & Schult. var. *trichandra*(Wight) Clarke, *Ficus beddomei* King, *Rhaphidophora pertusa* (Roxb.) Schott, *Scleria pergracilis* (Nees) Kunth, *Arundinella metzii* Hochst, *Sporobolus piliferus* (Trin.) Kunth. These species are not reported earlier from Madhya Pradesh.
780. **Roy, G.P. & Shukla, B.K. 1983.** "New records of Madhya Pradesh- I". *J. Econ. Taxon. Bot.* 4(2): 587–589. Abstract: In the present paper five species, viz. *Eragrostis pappiana* Chiov., *E. riparia* (Willd.) Nees, *E. aspera* (Jacq.) Nees, *Bambusa vulgaris* Schrad ex Wendl. and *Salvia coccinea* Juss. ex Murr. have been recorded for the first time from Madhya Pradesh. Their brief description and distribution are also given.
781. **Rathakrishnan, N.C. & Singh, A.N. 1982.** "*Habenaria barbata* A. Wight– An Orchid recorded from Madhya Pradesh". *J. Econ. Taxon. Bot.* 3: 284. Abstract: A terrestrial orchid, *Habenaria barbata* A. Wight has been reported for the first time for Madhya Pradesh from Kharra, Raigarh district. Earlier this species was reported only from South India and Sri Lanka.
782. **Ray, S. & Sainkhediya, J. 2014.** "Some new records for the flora of Madhya Pradesh". *Biosci. Discov.* 5(2): 187–192.
783. **Roy, G.P. & Dixit, S.K. 1985.** "Addition of two new taxa to the flora of Madhya Pradesh". *J. Econ. Taxon. Bot.* 6: 237–238. Abstract: The paper present two taxa i.e. *Ficus heterophylla* L. f. and *Ficus lanceolata* Roxb. which are determined as new records for the recognized state Madhya Pradesh.
784. **Roy, G.P. & Dixit, S.K. 1986.** "*Polypleurum dichotomum* (Gardn.) J.B. Hall

- (Podostamaceae)— A new record for central India”. *Indian J. Forest.* 9(1): 87–89. Abstract: *Polypleurum dichotomum* (Gardn.) J.B. Hall (Podostamaceae) has been recorded for the first time for Madhya Pradesh from Orcha in Abujh-Marh area of Bastar district. A perusal of literature revealed that this species was confined to western Ghats and Nilgiris. Now this plant extends its range of distribution to central India from south India.
785. **Roy, G.P. & Dixit, S.K. 1987.** “Addition to the flora of Madhya Pradesh – I. Some rare plants”. *J. Econ. Taxon. Bot.* 9(1): 97–100. Abstract: Some interesting species of angiosperms, viz. *Heteropogon triticeus* (R. Br.) Stapf (Poaceae), *Limnophila chinensis* (Osbn.) Merr. (Scrophulariaceae), *Sarcostemma intermedium* Decaisne (Asclepiadaceae) and *Terniola zeylanica* (Gardn.) Tul. (Podostemaceae) has been reported for the first time for the flora of Madhya Pradesh from Abujh-Marh area, Bastar district.
786. **Roy, R.S. & Dixit, S.K. 1987.** “Addition to the flora of Madhya Pradesh-I. Some rare plants”. *J. Econ. Taxon. Bot.* 9: 97–100.
787. **Sahni, K.C., Vaid, K.M. & Naithani, H.B. 1972.** “Addition to the Cyperaceae of Madhya Pradesh”. *Indian Forester* 98(3): 192–194. Abstract: A comprehensive account of the ‘Cyperaceae of Madhya Pradesh’ published by Tiwari and Maheshwari lists 97 species. The present paper records six more species as additions to the earlier enumeration. These are *Cyperus cephalotes* Vahl, *C. melospermus* (Nees) V. Suringer, *Elaeocharis geniculata* (L.) Roem. & Sch., *Fimbristylis aciminata* Vahl, *F. eragrostis* (Nees) Hance and *Scleria rugosa* R. Br.
788. **Sahu, T.R. 1983.** “Two new records from Bundelkhand region”. *Geobios New Rep.* 2: 158–159.
789. **Samvatsar, S. 1995.** “*Alternanthera bettzickiana* (Regel.) Voss., a new weed record from West Madhya Pradesh”. *Indian Bot. Repert.* 14(1&2): 131–132.
790. **Saxena, H.O. 1966.** “*Utricularia arenaria* A. DC.— A new record for India from Pachmarhi (Madhya Pradesh)”. *Indian Forester* 92(7): 493–494. Abstract: *Utricularia arenaria* A. DC. hitherto known from tropical Africa (from Senegal to Transval and south West Africa) and Madagascar was record India for the first time from Pachmarhi, Madhya Pradesh.
791. **Saxena, H.O. 1970.** “*Utricularia australis* R. Br.— A new record for India from Indore (Madhya Pradesh)”. *Indian Forester* 96(3): 249–250. Abstract: *Utricularia australis* R. Br. has been recorded for the first time for India from Indore, Madhya Pradesh.
792. **Saxena, H.O., Shukla, S.G. & Indorkar, P.S. 1969.** “Occurrence of *Alectra parasitica* A. Rich. var. *chitrakutensis* Rau in Madhya Pradesh”. *Indian Forester* 95(7): 485–486. Abstract: The paper records the occurrence of *Alectra parasitica* A. Rich. var. *chitrakutensis* Rau in Madhya Pradesh from Chitrakut (M.P. region), Jabalpur and Chanderi (Guna). Some properties of the local soils from Chitrakut are also described in brief.

793. **Sen Gupta, G. 1983.** "Notes on two species collected from Eastern Madhya Pradesh". *Indian J. Forest.* 6(4): 326–327. Abstract: Two species viz., *Aechmanthera gossypina* (Nees) Nees (Acanthaceae) from Raigarh and Surguja districts and *Cymbidium macrorhizon* Lindl. from Surguja district have been recorded for the first time for Madhya Pradesh.
794. **Shah, N.C. & Singh, S.C. 1987.** "Additions to the flora of Satna district (M. P)". *J. Econ Taxon. Bot.* 9(2): 497–498. Abstract: 15 species of angiosperms belonging to 13 genera and 11 families has been reported for the first time to the Flora of Satna district.
795. **Shaikh, M. & Mehra, S.S. 2012.** "*Tinospora sinensis* (Lour) Merr. (Menispermaceae)- A New records for Madhya Pradesh state Red Listed medicinal plants". *Vaniki Sandesh* 3(1): 45–47. Abstract: The present paper deals with the occurrence of *Tinospora sinensis* (Lour.) Merr. as a new records for Madhya Pradesh Awalia forest village and near by the Khedi village of Khandwa forest division along with description.
796. **Shaikh, M. & Tiwari, Arjun Prasad. 2016.** "*Solanum americanum* Mill. (Solanaceae): An addition to the flora of Madhya Pradesh, India". *J. Econ. Taxon. Bot.* 40(1-2): 62–64. Abstract: *Solanum americanum* Mill. has been reported for the first time for the flora of Madhya Pradesh from Jainabad, Burhanpur. Earlier this species was reported from Andhra Pradesh, Karnataka, Kerala, Odisha and Tamil Nadu.
797. **Shrivastava, J.L., Mishra, J. & Oommachan, M. 2000.** "New records and present position of Poaceae of Jabalpur (M.P.)". *J. Econ. Taxon. Bot.* 24(1): 71–74. Abstract: This study was undertaken during 1988-1994 for a reassessment of family Poaceae of Jabalpur and its neighbourhood. Earlier workers reported as many as 75 species belonging to this family at and around Jabalpur. Through the present paper a total of 131 species were recognized out of which 22 are new additions. Accordingly the present position of Poaceae becomes first among the ten dominant families in Jabalpur.
798. **Shukla, A.N. & Singh, K.P. 2009.** "Some additions to the flora of Achanakmar-Amarkantak Biosphere Reserve, Central India". *Indian J. Forest.* 32(3): 485–494. Abstract: The paper enumerates 55 taxa as new to the flora of Achanakmar-Amarkantak Biosphere Reserve. Correct nomenclature with citation, family name, habitat, locality, field number and flowering and fruiting period of each taxon has been provided.
799. **Shukla, A.N. & Singh, K.P. 2010.** "Three new additions to the flora of Madhya Pradesh". *Indian Forester* 136(5): 694–696. Abstract: Three species viz., *Rauvolfia tetraphylla* L., *Eryngium foetidum* L. and *Abroma augusta* (L.) L.f. have been reported for the flora of Madhya Pradesh from Achanakmar-Amarkantak Biosphere Reserve.
800. **Shukla, A.N. & Tiwar, A.P. 2013.** "*Fuirena umbellata* Rottb. (Cyperaceae): A new record for the flora of Chhattisgarh". *Indian Forester* 139(3): 267–268. Abstract: *Fuirena umbellata* Rottb. has been reported for the for the first time for Chhattisgarh from Ramgarh, Gurughasi Das National Park.

801. **Sikarwar, R.L.S. & Kaushik, J.P. 1993.** "*Ipomoea coptica* (L.) Roth ex Roem. & Schult. (Convolvulaceae)— A new record for Madhya Pradesh". *Indian J. Forest.* 16(1): 81–82. Abstract: *Ipomoea coptica* (L.) Roth ex Roem. & Schult. (Convolvulaceae) has been reported for the first time for Madhya Pradesh from Rithorakalan, Morena district, earlier reported from Rajasthan, W. India and Deccan
802. **Sikarwar, R.L.S. & Painuli, R.M. 1999.** "*Stylosanthes erecta* P. Beauv. (Fabaceae)— A new record for Madhya Pradesh". *Indian J. Forest.* 22(3): 276–277. Abstract: *Stylosanthes erecta* P. Beauv. (Fabaceae) has been recorded for the first time for Madhya Pradesh from Sesaipura, Morena district.
803. **Sikarwar, R.L.S., Dubey, P.C., Khanna, K.K. & Tiwari, A.P. 2010.** "Additions to the flora of Madhya Pradesh". *Phytotaxonomy* 10:29–31. Abstract: During the floristic survey in five districts of Madhya Pradesh, twelve species have been found as new records for the flora of Madhya Pradesh.
804. **Sikarwar, R.L.S., Kumar, Vivek, Rawat, A.K.S., Mehrotra, S. & Pushpangadan, P. 2003.** "*Radermachera xylocarpa* (Roxb.) K.Schum. – An endangered and interesting tree of Central India". *Phytotaxonomy* 3: 32–34. Abstract: *Radermachera xylocarpa* (Roxb.) K.Schum., a large tree of family Bignoniaceae, is usually found in the dry deciduous forests of central India. It is a rare species in the central Indian region with very thin and scattered population. The present paper provides data on identification, phenology, distribution, conservation status, ethnobotany, causes of depletion and conservation measures of the species.
805. **Singh, R.K. 2016.** "Nine new additions for the angiospermic flora of Chhattisgarh". *Nelumbo* 58: 104–106. Abstract: Nine species of angiosperm, viz., *Arthraxon hispidus* (Thunb.) Makino, *Cardamine flexuosa* With., *Eragrostis patula* (Kunth) Steud., *Ipomoea triloba* L., *Ischaemum bombaiense* Bor., *Mitracarpus hirtus* (L.) DC., *Sida mysorensis* Wight & Arn., *Solanum aculeatissimum* Jacq. And *S. sisymbriifolium* Lam. are reported for the first time from the state of Chhattisgarh.
806. **Singh, R.K., Garg, A. & Singh, P. 2015.** "Taxonomy, lectotypification and rediscovery of *Gymnosporia bailadillana* (Celastraceae), a little known, critically endangered taxa of Chhattisgarh state, India". *Phytotaxa* 226(2): 101–118. Abstract: *Gymnosporia bailadillana* (Celastraceae) is lectotypified and its taxonomy and distribution is discussed. The species is rediscovered after 67 years from Koriya district, Chhattisgarh state, India. First photographs of the live plant and digital images of the selected lectotype, isolectotypes and paratypes are provided.
807. **Singh, Shweta, Gupta, A., Rawat, A., Sahu, T.R. & Dixit, R.D. 2005.** "A new species of *Chlorophytum* (Liliaceae) from Madhya Pradesh". *J. Bot. Soc. Univ. Sagar* 40: 163–166. Abstract: A new species of *Chlorophytum* Ker-Gawl, viz., *Chlorophytum borivilianum*

Santapau & Fernandes belonging to the family Liliaceae has been described and illustrated from Bhopal, Madhya Pradesh.

808. **Singh, V. & Srivastava, N. 2017.** “*Trifolium tomentosum* L. (Fabaceae), an addition to the leguminous flora of Madhya Pradesh, India”. *Indian J. Forest.* 40(4): 385–388. Abstract: *Trifolium tomentosum* L. (Fabaceae) is recorded here as an addition to the flora of Madhya Pradesh. The specimens were collected by the collector from Niwari in Tikamgarh district of Madhya Pradesh, India. Detailed description, scanned herbarium specimen, illustrations and relevant notes are provided.
809. **Sinha, V. & Srivastava, N. 2017.** “*Trifolium tomentosum* L. (Fabaceae), an addition to the Leguminous flora of Madhya Pradesh, India”. *Indian J. Forest.* 40(4): 385–388. Abstract: *Trifolium tomentosum* L. (Fabaceae) is recorded here as an addition to the flora of Madhya Pradesh. The specimens were collected by the collector from Niwari in Tikamgarh district of Madhya Pradesh, India. Detailed description, scanned herbarium specimen, illustrations and relevant notes are provided.
810. **Srivastava, G., Singh, S., Singh, S. & Srivastava, S.K. 2005.** “New records of plants in Pachmarhi and Bori Reserve, Madhya Pradesh”. *Indian J. Forest.* 28(2): 156–161. Abstract: Madhya Pradesh is among the states with high forest cover. Pachmarhi Biosphere Reserve (PBR) is uniquely located where Northern Moist Deciduous (Sal) and Southern Dry Deciduous (Teak) forests overlap. Several botanical excursions have been carried out for the enumeration of the flora of the Pachmarhi area in recent past. During recent plant surveys we have recorded 28 plants hitherto not reported from this protected area. Plants for which new records have been made, are found in Madhya Pradesh and are expected to occur. Since PBR is most important PA in central India therefore these additions are worthwhile.
811. **Srivastava, R.C. & Kumar, A. 1987.** “Two additions to the flora of Madhya Pradesh”. *J. Econ Taxon. Bot.* 9(2): 499. Abstract: *Clerodendrum aculeatum* (L.) Griseb. and *Najas marina* L. are being reported for the first time for Madhya Pradesh.
812. **Srivastava, S.K. & Kumar, R. 1996.** “*Cotula australis* (Sieb. ex Spreng.) Hook.f. (Asteraceae) – New to Madhya Pradesh”. *Bull. Bot. Surv. India* 38(1-4): 100–101. Abstract: *Cotula australis* (Sieb. ex Spreng.) Hook.f. known to occur in the hills of Himachal Pradesh (Kullu and Manali), South India (Nilgiri and Pulney hills), hills of West Bengal (Darjeeling) and Delhi plains, has now been recorded from Pali Birsinghpur in district Shahdol of Madhya Pradesh. This species is also known from Uttar Pradesh, Meghalaya and Arunachal Pradesh. The present report of this species from Madhya Pradesh shows its extended distribution to this area revealing the first report as new record for this state.
813. **Tiwari, A.P. 2014.** “Some new additions of angiosperms for Chhattisgarh”. *Indian J.*

- Forest*. 37(4): 439–444. Abstract: Nine species, viz. *Crotalaria pallida* Aiton, *Hibiscus beddomei* Rakshit & Kundu, *Laggera crispata* (Vahl) Hepper & Wood, *Nervilia prainiana* (King & Pantl.) Seidenf., *Remusatia vivipara* (Roxb.) Schott, *Sauromatum pedatum* (Willd.) Schott, *Solanum viarum* Dunal, *Soliva anthemifolia* (A. Juss.) R. Br. and *Tiliacora acuminata* (Lam.) Hook. f. & Thomson are reported as new records for the Chhattisgarh state.
814. **Tiwari, A.P. 2015.** “Some new additions to the angiosperms flora of Chhattisgarh, India”. *Indian Forester* 141(12): 1315–1317. Abstract: During the floristic survey in few districts of Chhattisgarh, viz., Jashpur, Korea, Sarguja and study of herbarium specimens housed at CAL, the author collected and reported twelve interesting taxa of angiosperms viz., *Alysicarpus pubescens* J.S. Law, *Brachiaria ramosa* (L.) Stapf, *Crinum latifolium* L., *C. lorifolium* Roxb., *Digitaria ternate* (A. Rich.) Stapf, *Fuirena pubescens* Kunth, *Indigofera colutea* (Burm.f.) Merr., *Neptunia triquetra* (Vahl) Benth., *Nervilia plicata* (Andr.) Schltr., *Persicaria strigosa* (R. Br.) H. Gross, *Schoenoplectiella roylei* (Nees) Lye and *Scilla hyacinthine* (Roth) McBride, which are hitherto unrecorded from the state of Chhattisgarh.
815. **Tiwari, A.P. & Ansari, A.A. 2014.** “New record of angiospermic taxa for Chhattisgarh”. *Indian J. Forest*. 37(1): 97–102. Abstract: Six species, viz. *Acmella uliginosa* (Swartz) Cassini, *Axonopus compressus* (Swartz) P. Beauvois, *Desmodium neomaxicanum* A. Gray, *Richardia scabra* L., *Spilanthes radicans* Jacq. and *Stylosanthes fruticosa* (Retz.) Alston are reported as new records for Chhattisgarh state.
816. **Tiwari, A.P. & Shukla, A.N. 2012.** “*Crotalaria pallida* Ait. var. *obovata* (G. Don) Polhill (Fabaceae) – A new record for central India”. *Indian J. Forest*. 35(4): 511–512. Abstract: *Crotalaria pallida* Ait. var. *obovata* (G. Don) Polhill, belonging to the family Fabaceae, so far known from Kerala, Sikkim and Tamil Nadu is recorded for the first time for Madhya Pradesh from Dhanpuri, Shahdol district.
817. **Tiwari, A.P. & Shukla, A.N. 2014.** “*Sida tiagii* Bhandari (Malvaceae)– A new addition to the flora of Madhya Pradesh”. *Indian Forester* 140(5): 549. Abstract: *Sida tiagii* Bhandari has been reported for the first time for the flora of Madhya Pradesh from Bhind, Chambal Wildlife Sanctuary, Barahi.
818. **Tiwari, A.P. & Shukla, A.N. 2015.** “Some additions to the flora of Chhattisgarh, state, India”. *Phytotaxonomy* 15: 129–132. Abstract: Seven angiospermic species viz., *Flemingia bracteata* (Roxb.) Wight, *Pedalium murex* L., *Rhynchosyris obliquum* Blume, *Physalis angulata* L., *Senna hirsuta* (L.) Irwin & Barneby, *Senna uniflora* (Mill.) H.S. Irwin & Barneby and *Utricularia striatula* Sm. are reported as new records for the Chhattisgarh state. The correct nomenclature, description, phenology, habitat, locality and collection number of each species have been provided.
819. **Tiwari, A.P. & Shukla, A.N. 2016.** “*Smithia setulosa* Dalzell (Fabaceae)– A new record for central India”. *Indian Forester* 142(6): 613–614. Abstract: *Smithia setulosa* Dalzell

has been reported for the first time for central India from Khainala, West Nimar. Earlier this species was reported from Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra and Tamil Nadu.

820. **Tiwari, A.P., Kumar, K.M.P. & Ansari, A.A. 2013.** “*Neuracanthus* Nees (Acanthaceae) – A new generic record for Madhya Pradesh”. *Indian J. Forest.* 36(1): 91–95. Abstract: *Neuracanthus* Nees (Acanthaceae), hitherto unrecorded is reported as a new generic record to the flora of Madhya Pradesh from Katthiwada, Alirajpur district. Earlier *Neuracanthus sphaerostachyus* (Nees) Dalzell was reported from Gujarat, Jharknad, Karnataka, Maharashtra, Rajasthan and Tamil Nadu.
821. **Tiwari, A.P., Shaikh, M. & Magesh, C.R. 2018.** “Fourteen taxa of angiosperms as new distributional records for central India”. *Indian Forester* 144(3): 297–302. Abstract: The present paper deals with the fourteen taxa of angiosperms as new distributional record for central India (Madhya Pradesh and Chhattisgarh) based on authors own collections as well as studies of herbarium specimens housed at Central National herbarium (CAL) and Botanical Survey of India, Central Regional Centre, Allahabad. Correct nomenclature with citation, brief description, phenology, habit, distribution and other field details are provided.
822. **Tiwari, A.P., Shukla, A.N. & Khanna, K.K. 2013.** “*Hibiscus hirtus* L. (Malvaceae): A new record for the flora of Madhya Pradesh”. *Phytotaxonomy* 12: 169–170. Abstract: *Hibiscus hirtus* L. (Malvaceae) is reported as a new record for the flora of Madhya Pradesh from Kevti waterfall, Rewa.
823. **Tiwari, A.P., Lawand, Pramod Raghunath, Shukla, A.N. & Magesh, C.R. 2018.** “Three new distributional records of Rubiaceae for Chhattisgarh”. *Indian J. Forest.* 41(1): 31–33. Abstract: *Mitracarpus hirtus* (L.) DC., *Spermacoce exilis* (L.O. Williams) C.D. Adams ex W.C. Burger & C.M. Taylor and *Spermacoce latifolia* Aubl., are reported for the first time from Chhattisgarh. Taxonomic details, illustrations and photographs have been provided for all species.
824. **Tiwari, A.P., Shaikh, M., Lawand, Pramod Raghunath & Shukla, A.N. 2018.** “New distributional records of Poaceae for Chhattisgarh”. *Indian J. Forest.* 41(2): 217–218. Abstract: Four species of Poaceae, viz. *Euclasta clarkei* (Hack.) Cope, *Eulalia leschenaultiana* (Decne) Ohwi, *Paspalum longifolium* Roxb. and *Sporobolus piliferus* (Trin.) Kunth have been reported as new distributional records for Chhattisgarh state.
825. **Tiwari, A.P., Shaikh, M., Vaishya, J.K. & Magesh, C.R. 2018.** “Note on the occurrence of *Parahyparrhenia bellariensis* (Hack.) Clayton (Poaceae: Andropogoneae) in Madhya Pradesh”. *Indian J. Forest.* 41(3): 261–264. Abstract: Occurrence of *Parahyparrhenia bellariensis* (Hack.) Clayton, is being confirmed from Sailana Bird Sanctuary of Ratlam district of Madhya Pradesh. Earlier this species was endemic to Peninsular India. A detailed description with illustration and photoplate is provided for easy identification.



826. **Tiwari, A.P., Sikarwar, R.L.S., Khanna, K.K. & Dubey, P.C. 2016.** "Cressa L. (Convolvulaceae)—A new generic record for the flora of Madhya Pradesh". *Keanean J. Sci.* 5: 45–48.
827. **Tiwari, A.P., Shukla, A.N., Ansari, A.A. & Naik, M.L. 2017.** "Rubus L. (Rosaceae)— A new generic record for the Flora of Chhattisgarh". *Indian J. Forest.* 40(1): 101–102. Abstract: *Rubus* L. (Rosaceae), hitherto unrecorded from Central India is reported for the first time from Mainpat forest area, Sarguja, Chhattisgarh represented by *Rubus ellipticus* Smith. Detailed description, ecological observation alongwith photographs are provided for easy identification of the taxon in the field.
828. **Tiwari, A.P., Shukla, A.N., Shaikh, M. & Lawand, P.R. 2017.** "Note on the occurrence of *Cleistachne sorghoides* Benth. (Poaceae) in Madhya Pradesh". *Phytotaxonomy* 17: 129–131. Abstract: *Cleistachne sorghoides* Benth. has been reported as new distributional record for the flora of Madhya Pradesh. A detailed description with illustration are provided for easy identification.
829. **Verma, D.M. & Lal, Jagdish. 1982.** "Genus *Polypleurum* (Tay. ex Tul.) Warming (Podostemaceae)— New to Central India" *J. Econ. Taxon. Bot.* 3: 645–647. Abstract: *Polypleurum stylosum* (Wt.) J.B. Hall has been reported for the first time for central India from Raipur district.
830. **Wagh V.V. & Jain, A.K. 2015.** "New addition to the flora of Madhya Pradesh, India". *Ann. Pl. Sci.* 4(12): 1233–1235. Abstract: Present study reported 2 flowering plants which are new records for the flora of Madhya Pradesh namely *Neuracanthus sphaerostachys* (Nees) Dalz. (Acanthaceae) and *Habenaria longicorniculata* Graham (Orchidaceae). Plants are enumerated along with proper citations, collection number, brief description, family, synonyms, habitat, flowering and fruiting, locality and any other uses.

#### Endemism, IUCN Threat Status and Conservation

831. **Bharti, V.K. 2015.** "The rare and threatened plants of Shahdol Division of forest of M.P., India". *Int. J. Appl. Res.* 1(12): 545–548.
832. **Bhatnagar, P., Goswami, M. & Jain, S. 2012.** "Conservation and harvesting of *Sterculia urens* (Kullu) Gum in Madhya Pradesh". *Vaniki Sandesh* 3(3): 1–5. Abstract: *Sterculia urens* (Kullu) tree is found in dry deciduous forests of India. The tree exudes a viscous gum, called 'Karaya' gum. The gum is extensively used in cosmetic, soap, food and pharmaceutical industries, besides having its domestic and edible uses. The gum is locally harvested by villagers from kullu trees in nearby forest areas. The traditional method of gum tapping is destructive, causing damage to the trees and resulting, drying and death of tree. Lack of proper training on scientific tapping techniques led to unsustainable

harvesting earlier. Since population has increased there is competition among gum collectors which is leading to destruction of trees. Conservation of kullu trees has to receive top priority which can be ensured by using scientific tapping method and proper harvesting.

833. **Bhattacharya, A.K. & Hansda, R. 2003.** "Ex-situ conservation of medicinal and aromatic plants in India with special reference to Madhya Pradesh". *Indian Forester* 129(1): 93–101. Abstract: The paper embodies the recent trends in ex-situ conservation of Medicinal and Aromatic Plants (MAPs) as an alternative to biodiversity conservation and as an additional source of income with special reference to Madhya Pradesh. Efforts have been made to highlight the problems encountered in cultivation for necessary policy consideration if this emerging sector is to become a financially rewarding and ecologically sustainable one.
834. **Datt, B., Rana, T.S., Jha, S.S. & Rao, R.R. 2001.** "Threatened plants of Bundelkhand region". *J. Non-Timber Forest Prod.* 8(1/2): 120–123. Abstract: The present paper deals with 20 threatened species of Bundelkhand region. Each species is provided with a brief information on habit, distribution, main cause of threat and status according to new IUCN Red List criteria.
835. **Dubey, P.C., Khanna, K.K., Sikarwar, R.L.S. & Tiwari, A.P. 2007.** Threat Assessment of Plant Diversity in Amarkantak Area. In: Joshi, K.C. & Mandal, A.K. (Ed.), *Research Needs for Achanakmar-Amarkantak Biosphere Reserve*. Tropical Forest Research Institute, Jabalpur. Pp. 55–79.
836. **Dubey, P.C., Khanna, K.K., Sikarwar, R.L.S., Saxena, R.N. & Tiwari, A.P. 2007.** "Biodiversity and its threat assessment in Vindhyan region". *Indian J. Trop. Biodiv.* 15(1): 1–52.
837. **Dwivedi, P.K. & Salim, M. 2016.** "Biodiversity of rare and threatened medicinal plants of Dubri wildlife sanctuary of Sidhi district, Madhya Pradesh". *Int. J. Bot. Stud.* 1(6): 1–4. Abstract: The present study deals with many plant species observed from floristic data. Rare or endangered plants were recorded from the study area. In the present paper 37 plant species have been recorded as rare or endangered plants. All 37 plant species are enumerated with their botanical names, local names, red data categories and present status in the study area. Many of these plant species have immediate attention for their conservation. It is an alarming situation where endangered species requires more and more attentions. The present study also highlights that some rare or endangered plants abundantly found in Dubri Wildlife Sanctuary of Sidhi district. The protected forest area is observed as the best conservation model of the plant diversity and it harbors a large number of endangered and rare plants.
838. **Jadhav, Dinseh. 2014.** "Exploration of trees of tribal pockets of Ratlam district of Madhya Pradesh for biodiversity conservation". *J. Econ. Taxon. Bot.* 38(2): 343–347.

Abstract: Frequent ethnobotanical and taxonomical surveys were conducted in different seasons during 2004 to 2008 in different tribal inhabited villages of Ratlam district of Madhya Pradesh. These surveys were carried out to identify the multipurpose usable 72 wild trees of 61 genera under 36 families in the tribal inhabited villages of the district. The plant provide renewable plant resources such as timber, gum, resin, fodder, food, fibre, fuel, medicine, beverage, tannin, dye, cosmetics, etc. and also helps for the conservation of biodiversity, control soil erosion, maintain humidity and regulate environmental pollution. The present study was conducted with a view to protect biodiversity.

839. **Jain, A.K. & Patole, S.N. 2001.** "Some threatened plants of Panchmari Biosphere Reserve of Madhya Pradesh". *J. Indian Bot. Soc.* 80: 151–155.
840. **Jain, A.K. & Shrivastava, H.S. 2000.** Conservation strategy for sustenance of threatened bioresources of Panchmarhi Forest Division, Madhya Pradesh. In: Sharma, J.K. *et al.* (Eds.), *Proc. Biosphere Reserve in India and their management*, MoEF, New Delhi & KFRI, Peechi, Kerala. Pp. 211–217.
841. **Jain, A.K. & Vairale, M.G. 2007.** "Some threatened angiospermic taxa of Chambal eco-region (M.P.)". *Phytotaxonomy*7: 107–110. Abstract: Chambal eco-region of Madhya Pradesh, a central province of India comprises eight districts. Vegetation of this region exhibits a mosaic picture due to varied physiognomy and climatic conditions. The paper reports the occurrence of 10 threatened angiospermic taxa belonging to seven families in this region. Factors responsible for their threatened status are also discussed.
842. **Jain, A.K., Wagh, V.V. & Kadel, C. 2011.** "Conservation status of some miniature sacred groves in Jhabua district (M.P.)". *Ethnobotany*23: 106–115. Abstract: The plant diversity of western Madhya Pradesh is diminishing as a fast rate due to anthropogenic disturbances and environmental degradation. Anthropogenic disturbances is a major factor responsible for fragmentation of forest vegetation; as a result, there is a preponderance of small patches, some of them are still preserved as sacred groves because of strong religious belief held by the indigenous people of Jhabua district. Most of the medicinal plants are confined to these groves only. In the present study, 226 plant species belonging to 71 families have been recorded in 4 miniature sacred groves in Jhabua district.
843. **Jain, S.P., Singh, J. & Singh, S.C. 2003.** Rare and endangered medicinal & aromatic plants of Madhya Pradesh. In: Singh, V. & Jain, A.P. (Eds.), *Ethnobotany & Medicinal Plants of India & Nepal*. Scientific Publishers, Jodhpur. Vol. 1, pp. 925–932.
844. **Jain, S.P., Singh, J. & Singh, S.C. 2003.** "Rare and endangered medicinal and aromatic plants of Madhya Pradesh". *J. Econ. Taxon. Bot.* 27(4): 925–932. Abstract: 27 species of medicinal and aromatic plants of M.P. which are considered rare and endangered have been enumerated with habit and habitat, distribution, remarks and medicinal uses.

845. **Khan, A.A., Agnihotri, Santosh Kumar, Singh, Manoj Kumar & Ahirwar, Ramesh Kumar 2008.** "Enumeration of certain angiospermic plants used by Baiga tribe for conservation of plants species". *Pl. Archives* 8(1): 289–291. Abstract: The present paper deals with uses of certain angiospermic plant species by Baiga tribes for conservation. Baiga tribes utilize a large number of plant species for food, fodder and medicine. So by their long experience they are fully aware of the importance of forest cover. Their beliefs and sentiments are attached to the forest and hence they do not cut or destroy these forests. This paper enumerated some 46 angiospermic plant species conserved by Baiga tribe along with the reasons for their conservation.
846. **Khan, S.S. & Malhotra, D. 2002.** "Plant genetic diversity exploration, evaluation, conservation: Angiospermic diversity in Bhopal – Reassessment with a particular reference to endangered species and their conservation. East. West Press Pvt. Ltd.
847. **Khanna, K.K. & Kumar, A. 2008.** "Endemism in the flora of Madhya Pradesh". *Indian J. Forest.* 31(3): 451–454. Abstract: The paper deals with the status of endemic plants in Madhya Pradesh. An analysis has indicated that 12 taxa are endemic in the state, out of which 4 taxa are endemic in Hoshangabad district, 3 in Betul district, 2 in unreported locality of Central Province and one each in Balaghat, Tikamgarh and Ujjain districts. The nature and causes of endemism and their conservation have been discussed in the paper.
848. **Khanna, K.K., Jha, A.K., Kumar, A. & Murti, S.K. 2004.** "Endemic and rare plants of Chhattisgarh". *Bull. Bot. Surv. India* 46(1-4): 77–138. Abstract: The paper deals with an account of endemic and rare plants of Chhattisgarh- a newly constituted state of Indian union. Four species viz., *Staurogyne perpusilla* Henry & Balakr., *Maytenus bailadillana* (Narayan. & Mooney) Raju & Babu, *Eriocaulon rajendrababui* Ansari & Balakr. And *E. Raipurensis* Khanna, Mudgal & Kumar are endemic to the state. Further, 481 taxa are rare in the state. Various conservation measures have been proposed in the paper.
849. **Khare, P.B. 1989.** "A survey of threatened state of ferns in Amarkantak, Madhya Pradesh, central India". *Indian Fern J.* 6: 56–59. Abstract: Studies on pteridophytic flora of Amarkantak hills forms the subject of the present study. Apart from these, the study also envisages comparative analysis of the fern flora of the area as enumerated by different authors from time to time. The present analysis reveals non-availability of 8 taxa which had been reported during earlier collections. Main reasons for this non-availability are attributed to extensive collection of fern rhizomes for the purpose of worship and clearing of forests for bauxite mines. These factors put together are bound to disturb the ecological balance in the area and further threaten occurrence of many more taxa.
850. **Kumar, V.&Sikarwar, R.L.S. 2002.**"Observations on some rare and endangered plants of Chhattisgarh state, India".*Phytotaxonomy* 2:135–142. Abstract: Chhattisgarh state,

situated in central India, is endowed with rich forests and mineral wealth. The natural resources of this area have been depleting fast during the last few decades due to destruction of habitats by cutting of forests for agriculture, industrialization, urbanization, mining and quarrying, construction of roads, railway lines, over-exploitation of commercial and medicinal plants coupled with natural calamities like flood, drought, pathogenic diseases, invasive alien weeds, etc. The authors made extensive botanical explorations in various districts of Chhattisgarh and observed that several plants, which are listed in rare and endangered categories of Red Data Book, are growing in the forests, but are struggling for survival in their natural habitats. If the current human interference and other casual factors continue operating, the days are not far when these plants will vanish for ever from their natural dwellings. The present paper gives the description and status of 35 rare and endangered plants of Chhattisgarh state.

851. **Mishra, M. 2013.** "Current status of endangered medicinal plant *Hedychium coronarium* and cause of population decline in the natural forests of Anuppur and Dindori districts of Madhya Pradesh". *Int. Res. J. Biol. Sci.* 2(3): 1–6.
852. **Patole, S.N. 2004.** *Plant biodiversity of Pachmarhi Biosphere reserve with reference to the conservation strategy on threatened species.* Ph.D. Thesis, Jiwaji University, Gwalior (Unpublished).
853. **Paul, T.K. & Nayar, M.P. 1987.** "Endemic taxa of the family Malvaceae of India". *J. Econ. Taxon. Bot.* 11(1): 41–46. Abstract: Revision of the family Malvaceae in India reveals that 24 genera and 104 species are distributed in the tropic, sub-tropics and occasionally in temperate regions. There is no endemic genus of this family in India but 15 taxa are endemic of India of which 4 taxa are confined to Thar desert of Rajasthan, 7 are in Peninsular India and another 4 taxa are endemic to India. Recent nomenclature, type, a short description for field identification, phenology, distribution etc. have been provided for each taxa.
854. **Prasad, R. & Dixit, R.D. 1993.** An endemic medicinal parasite from Madhya Pradesh under threat of extinction. In: Singh, Promod (Ed.), *Rural Reconstruction, Ecosystem and Forestry.* M.G. Chitakoot Gramodaya University, Chitrakoot.
855. **Ray, S. 2001–2003.** "Some rare plants of Dewas district (M.P.)". *J. Bot. Soc. Univ. Sagar* 36–38: 28–31. Abstract: This paper represents 17 rare plants of Dewas district (M.P.) which are described taxonomically. The 874 species of flowering plants of over 121 families and 505 genera have been explored from the study area. Some plants like *Allmania nodiflora* (Linn.) R.Br. ex Wt. var. *aspera* (Roth) Hook., *Didymocarpus pygmaea* Cl., *Polycarpaea corymbosa* (Linn.) Lam., *Rothia trifoliata* Pers., *Theriophonum dalzelli* Schott are very rare in the district. A brief description of these rare plants enumerated together with all details.

856. **Ray, S. & Sainkhediya, J. 2014.** "Rare and threatened plants of Nimar region, Madhya Pradesh". *Int. J. Pl. Animal Environm. Sci.* 4(4): 235–243. Abstract: Nimar region is located in south western part of Madhya Pradesh covering four districts namely West Nimar (Khargone), East Nimar (Khandwa), Burhanpur and Barwani. Plant survey was in the Nimar region from 2008-2013 in order to assess the current status of threatened plants in Nimar region of Madhya Pradesh. Present study reports 94 RET plants distributing in 45 Families of which 25 are Vulnerable, 40 are endangered, 18 are critically endangered, and 11 are near threatened. Main reasons responsible for shrinking of the population are over grazing, plugging old grassland, clearing of forest for agriculture, megaprojects and eruption of plants for fire wood, felling of trees for leaf collection, Pollution, and failure of Pollination. This situation may further deteriorate if appropriate conservation techniques would not be applied.
857. **Sahu, P.2000.** "Conservation based interaction between biological and cultural diversity amongst Maria tribals of Bastar". *J. Med. Arom. Pl. Sci.*(22/4A & 23/1A): 511–513.
858. **Sharma, S.B. & Sharma, S. 2007.** "Conservation assessment of some highly exploited endangered-rare medicinal plants in transition zone of Pachmarhi Biosphere Reserve". *J. Non-Timber Forest Prod.* 14(3): 181–188. Abstract: Pachmarhi Biosphere Reserve is rich in biodiversity and gene pool. The forests of this area are full of valuable medicinal plants. But majority of medicinal plants of transition zone are facing serious threats due to various activities like overgrazing, and destruction of forests for cultivation. Many of them are disappearing due to indiscriminate exploitation by the local people including tribal due to their immense ethnobotanical and trade values. All this has resulted in over-exploitation and depletion of the natural population of these species, which has pushed them to the brink of threat and extinction. In this paper conservation assessment of some highly exploited endangered medicinal plants viz., *Chlorophytum arundinaceum* Baker, *Gloriosa superba* L., *Gymnema sylvestre* (Retz.) Schuttet and *Sterculia urens* Roxb. have been given, which needs special attention for conservation.
859. **Shivkumar, P., Shivkumar, V.R. & Harinkhede, D.K. 2010.** "Conservation of economic and medicinal plants in natural condition". *Vaniki Sandesh* 1(1): 13–20. Abstract: Total 102 plant species belonging to 48 families of medicinal and economic importance are conserved on the banks of the Narmada river, near Bhatoli village, Gwarighat, Jabalpur as a store house of such plants, which are naturally grown and represent as an in-situ conservation system at the conserved forest land of Sarvamangalam Natural Products Pvt. Ltd, Gwarighat, Jabalpur (M.P.). Some information on these important conserved plants is given in this paper.
860. **Shrivastava, N.K. 2012.** "Rare plants of Bandhavgarh National Park (M.P.) India". *Indian J. Appl. Pure Biol.* 27(2): 203–205. Abstract: The present study deals with rare plants of Bandhavgarh National Park (M.P.). The park has a rich source of medicinal

plants and is inhabited by a large population of tribals who make use of various parts of plants for health care and other purposes, as a consequence many species of plants have disappeared in the Bandhavgarh National Park, and a number of them are on the verge of extinction.

861. **Sikarwar, R.L.S. 2008.** "Status, Utilization and Conservation of Threatened Medicinal Plants of Chitrakoot region. In: Upadhyay, Ashutosh (Ed.) *State of Art in Cultivation, Collection, Storage, Processing & Marketing of Herbal, Medicinal, and Aromatic Plants*. MGCGV, Chitrakoot. Pp. 29–35.
862. **Sikarwar, R.L.S. & Tiwari, Ashok Kumar. 2010.** "Exploitation, utilization and conservation of endemic and critically endangered plant species *Alectra chitrakutensis* in the Chitrakoot region". *Ethnobotany* 22: 125–127. Abstract: The present paper deals with some interesting ethno-medicinal uses, causes of exploitation and *ex-situ* conservation methods of an endemic and critically endangered medicinal plants *Alectra chitrakutensis* (Rau) R. Prasad & R.D. Dixit of Chitrakoot region.
863. **Sikarwar, R.L.S., Dubey, P.C. & Tiwari, Arjun Prasad. 2016.** "*Dillenia pentagyna* Roxb. (Dilleniaceae) in Central India: A plea for its conservation". *Indian Forester* 142(7): 649–653. Abstract: *Dillenia pentagyna* Roxb. (Dilleniaceae) is a moderate deciduous tree usually found in dry deciduous forests of central India. It is a critically endangered species in central India with very scant distribution. A detailed threat assessment cum ethnobotanical study was carried out by the authors during the year 2005-2009. The present paper provides data on its distribution, threat status and causes of depletion, ethnobotanical uses and conservation measures of the species.
864. **Sikarwar, R.L.S., Tiwari, Arjun Prasad & Dubey, P.C. 2010.** "*Cordia macleodii* Hook.f & Thomson (Cordiaceae)– A critically endangered threatened species from Central India". *Indian Forester* 143(7): 716–717. Abstract: During the field survey authors have observed that *Cordia macleodii* Hook.f & Thomson (Cordiaceae) is declining fast in population from natural habitats due to over exploitation for timber and loss of natural habitats by reckless hacking and cuttings of forests. Different tribal communities of central India use the various part of the plant for the treatment of different ailment and diseases. The indiscriminate cutting of this tree from natural habitats posed serious threat of their survival. Based on IUCN criteria and personal field observations, Dubey *et al.* (2008) assessed this plant under critically endangered category in central India.
865. **Singh, R.K. 2016.** "Endemic and threatened angiosperms of Chhatisgarh state, India". *J. Non-Timber Forest Prod.* 23(4): 239–243. Abstract: The endemic and threatened angiosperms of Chhatisgarh state are enumerated with habit and phenology. Four species are strictly endemic to Chhatisgarh state and 116 species which are endemic to other states and found in Chhatisgarh are also reported.

866. **Srivastava, R.C. 1986.** "Rare components of Madhya Pradesh Flora-I". *J. Trop. Forest.* 2(2): 146–150. Abstract: Present communication provides an account of 18 rare/threatened taxa of flowering plants of Madhya Pradesh.
867. **Srivastava, R.C. 1987.** "Rare and less known plants of Madhya Pradesh- II". *J. Econ. Taxon. Bot.* 11(1): 91–94. Abstract: Present paper deals with 11 taxa of flowering plants which are of rare occurrence in Madhya Pradesh. Their correct nomenclature along with an upto date synonymy, a brief account of each taxa, phonological data, uses (wherever known) etc. are given for their easy identification in the field. These taxa are: *Argyrea hirsuta*, *Aspidopterys glabriuscula*, *Blumea lanceolaria*, *Holmskioldia sanguinea*, *Ipomoea purpurea*, *Utricularia arenaria*, *U. baouleansis*, *U. hirta*, *U. polygaloides*, *U. pubescens* and *U. uliginosa*.
868. **Srivastava, S.K. 2002.** "Threatened taxa of *Jasminum* L. in India". *Phytotaxonomy* 2: 94–99. Abstract: *Jasminum* L. is represented in India by 49 species mainly distributed in Himalayas, Deccan Peninsula and Andaman & Nicobar islands. 16 species are endemic to India. Of these, eight are rare and considered to be endangered, as they have not been recorded, after their type collection. This paper gives taxonomic details of eight threatened species, emphasizing their conservation status, type localities and future strategies for undertaking conservation measures.
869. **Srivastava, S.K., Dixit, R.D. & Shukla, B.K. 1997.** "A note on endemic, rare and endangered vascular taxa of Madhya Pradesh". *J. Econ. Taxon. Bot.* 21(1): 225–232. Abstract: The present paper deals with the taxonomic description, nomenclatural citation, ecological notes, their present status of occurrence and endemism in respect of seventeen vascular taxa of Madhya Pradesh belonging to different genera and families. Of these, twelve species are endemic to India confining their distribution to Madhya Pradesh only and other five species are known to rare in occurrence in the state.
870. **Tiwari, V.K., Masih, S.K. & Shrivastava, J.L. 2007.** "Rare floral elements of Madhya Pradesh. Part-4: *Gmelina arborea* Roxb. (Khamer)". *Vaniki Sandesh* 31(4): 11–16. Abstract: Present paper contributes a detailed information of the medicinal, economical, traditional and commercial importance of *Gmelina arborea* Roxb. has been given in this paper.
871. **Verma, K.S. & Kurmi, L. 2013.** "Investigation and enumeration of commercial and threatened flora of Leguminosae in Jabalpur region of Madhya Pradesh". *Life Sci. Bull.* 10(1): 21–24. Abstract: A present study enumerates 14 commercial value Leguminous plants and 40 threatened plants species of Leguminosae family which are used by the traditional healers of Jabalpur region Madhya Pradesh. Due to deforestation, loss of biodiversity and indiscriminate exploitation of wild and natural resources; many valuable plants of Fabaceae as *Abrus precatorious*, *Butea superba*, *Bauhinia vahlii*, *Erythrina suberosa*, *Mucuna pruriens*, *Prosopis spicigera* etc. are under a serious threat of extinction. The necessity of conserving these plants that are being over-exploited for their



miscellaneous utilities is now well recognized.

872. **Verma, K.S., Kurmi, L., Awasthi, A. & Khan, S. 2013.** "Conservation status of the Fabaceae taxa in eastern Madhya Pradesh". *Phytotaxonomy* 13: 128–131. Abstract: The present study enumerates conservation status and strategies of 40 plant species of Fabaceae family which are used by the traditional healers of eastern Madhya Pradesh. It sustains a very rich traditional medicinal plant wealth and inherits unique plant and animal communities. Due to deforestation, loss of biodiversity and indiscriminate exploitation of wild and natural resources, many valuable plant species of Fabaceae as *Abrus precatorius*, *Butea superba*, *Bauhinia vahlii*, *Erythrina suberosa* and *Mucuna pruriens* etc. are under a serious threat of extinction. The necessity of conserving these plants being over exploited for their miscellaneous utilities is now well recognised.
873. **Wagh V.V. & Jain, A.K. 2013.** "Status of threatened medicinal plants of Jhabua district, Madhya Pradesh, India". *Ann. Pl. Sci.* 2(10): 395–400. Abstract: Recent years have witnessed an upsurge in the popularity of herbal medicines which are obtained from rich diversity of medicinal and aromatic plants available in India. However, these plants are still to large extent gathered and collected from the natural stands with little attention to its replenishment. The present study was carried out in Jhabua district of Madhya Pradesh, to know the conservation assessment and present status of population of medicinal and other plant species. The paper highlights the presence of 6 critically endangered, 25 endangered and 22 vulnerable species in various localities of Jhabua district.

#### **Ethnobotany, Sacred Groves and Medicinal Plants**

874. **Abhyankar, R.K. & Upadhyay, Ravi. 2011.** "Ethnomedicinal studies of tubers of Hoshangabad, M.P.". *Bull. Environm. Pharmacol. & Life Sci.* 1(1): 57–59. Abstract: Ethnomedicinal study of Wild medicinal tubers of Hoshangabad district was done. In the present study 24 species of plant tuber growing wild in forest, which are used by tribals of Hoshangabad district for curing several diseases like skin disease, cough, asthma, diarrhoea, wound, piles, seminal debility, and other common diseases. The present paper report the tubers their local names, availability, methods of uses for curing diseases.
875. **Abhyankar, R.K. & Upadhyay, Ravi. 2012.** "Ethnomedicinal studies of seeds and fruits of Hoshangabad (M.P.)". *Life Sci. Leaflets* 9: 58–62. Abstract: Ethnomedicinal study of Wild medicinal seeds and fruits of Hoshangabad district was done. In the present study 50 species of plant seeds and fruits growing wild in forest, which are used by tribals of Hoshangabad district for curing several diseases like skin disease, cough, snake bite, diarrhoea, wound, piles, seminal debility, and other common diseases. The present paper reports the seeds & fruits their local names, availability, methods of uses for curing diseases.

876. **Abhayankar, R.K., Upadhyay, Ravi & Shukla, N.P. 2009.** "Observations on some anti-inflammatory uses of plants from Mahadeo Hills in Madhya Pradesh". In: Singh, V. (Ed.), *Ethnobotany and medicinal plants of India and Nepal – Vol. 3*. Scientific Publishers, Jodhpur. Pp. 189–191. Abstract: The present paper reports some plants used by the tribals of Mahadeo hills in Madhya Pradesh against various inflammatory responses like rheumatism, arthritis, joint pains, hydrocoel, piles, conjunctivitis and fever.
877. **Abhayankar, R.K., Upadhyay, Ravi & Shukla, N.P. 2009.** "Observations on some anti-inflammatory uses of plants from Mahadeo hills in Madhya Pradesh". *J. Econ. Taxon. Bot.* 33(Suppl.): 189–191. Abstract: The present paper reports some plants used by the tribals of Mahadeo hills against various inflammatory responses like rheumatism, arthritis, joint pains, hydrocoel, piles, conjunctivitis and fever.
878. **Agarwal, K. & Varma, R. 2012.** "Some ethnomedicinal plants of Bhopal district used for treating stone diseases". *Int. J. Pharm. Life Sci.* 3(1): 1356–1362. Abstract: The present work has been done to study the flora of Bhopal district which is useful for treating stone diseases. This study showed the first hand information on such medicinal plants available here. This information was gathered through literature search from various sources such as books, journals, internet websites and field survey in various localities of Bhopal district. The study revealed information on 79 ethnomedicinal plant species belonging to 42 families being used for stone problems. Most of the plants belonged to Asteraceae family.
879. **Agarwal, S.R. 1981.** Trees, flowers and fruits in Indian folk songs, folk proverbs and folk tales. In: Jain, S.K. (Ed.), *Glimpses of Indian Ethnobotany*. Oxford & IBH Publ. Co., New Delhi, pp. 3–12.
880. **Ahirwar, J.R. 2010.** "Some medicinal plants of Tikamgarh district of Madhya Pradesh". *Indian Forester* 136(6): 827–836. Abstract: This paper deals with the survey of some important medicinal plants used against different types of diseases by the people of village communities, mostly belonging to schedule caste and schedule tribe of Tikamgarh district of Madhya Pradesh. During the survey, 11 plant species of angiosperms were enumerated. Their local names, botanical names, families, plant parts and their utilization are presented in this paper.
881. **Ahirwar, J.R. 2017.** "Socio-religious plants of Malwa plateau in Madhya Pradesh". *J. Trop. Forest.* 33(4): 28–36. Abstract: The present study provides the information regarding the socio-religious plants of Malwa region of India. During the survey, 48 plant species of angiosperms were enumerated which are used in various social and religious rites and rituals, like marriage ceremony, worshipping, child birth, festivals, cremation, etc. The information was collected by conducting intensive interviews and long discussions with villagers in Malwa region of Madhya Pradesh.

882. **Ahirwar, Raghvendra Prakash. 2017.** "Ethnobotanical survey of medicinal plants commonly used by tribal person of Tikamgarh district Madhya Pradesh". *World J. Pharmaceut. Res.* 6(7): 1085–1107. Abstract: Use of plants resources for fulfilment of various requirements of any community may be regarded as a part of a cultures traditional knowledge. The tribes of Madhya Pradesh are found to be rich in traditional knowledge system and are using their indigenous methods in treatment of different diseases. The present paper deals with the detail study of medicinal plants used by Tikamgarh district Madhya Pradesh using a quantitative consensus analysis. A total of 106 plants species belonging to 51 families used for medicinal and general health purposes were identified and included with relevant information. An informant consensus (FIC) analysis revealed a high level of homogeneity among the informants knowledge on various ethnomedicinal plants. High consensus factor was observed for dermatological disorder (0.64) and low in oral and dental problem (0.5) among different plant parts leaves were used in most of the cases for treatment of various diseases.
883. **Ahirwar, Raghvendra Prakash, Tripathi, Jagrati & Singh, Ranjana 2017.** "Ethnomedicinal study of plants used by tribal person for dysentery diseases in Tikamgarh district, M.P.". *Int. J. Appl. Res.* 3(4): 818–823. Abstract: The indigenous people of Tikamgarh district are reputed to have been treating many diseases effectively with plants. However documentation of these plants use is not available. The present study documented the medicinal plants used traditionally for the treatment of dysentery in the Tikamgarh district of Madhya Pradesh. Twenty two traditional healers were interviewed with the help of a prepared questionnaire. Plants that were cited were coded in the field for identification later. 38 plant species were cited for the treatment of dysentery respectively. Out of twenty two respondents had knowledge of plants used in treating dysentery were documented. The survey uncovered very important sources of cheap remedies for dysentery.
884. **Ahirwar, Raghvendra Prakash, Tripathi, Jagrati & Singh, Ranjana 2017.** "Ethnomedicinal study of plants used by tribal person for fever diseases in Tikamgarh district, M.P.". *Int. J. Bot. Stud.* 2(3): 64–67. Abstract: Madhya Pradesh is a central state of India and Tikamgarh is a district of Madhya Pradesh it is located in the Northern part of this state. It lies on the Bundelkhand plateau between the Jamni a tributary of Betwa and Dhasan. Since ancient time several tribal communities like Kol, Gond and Mawasi are lives in district. They have been used several plant species for the treatment of fever from a long time. In the present paper highlights 41 ethnomedicinal plants are traditionally used by the tribal person of this area.
885. **Ahirwar, Ramesh Kumar 2010.** "A survey of medicinal plants used by tribals of Anuppur District, Central India". *Indian J. Appl. Pure Biol.* 25(2): 227–230.

886. **Ahirwar, Ramesh Kumar 2010.** Ethnomedicinal uses of plant roots from Shadol district of M.P. India. *Indian J. Appl. Pure Biol.* 25(1): 71–76.
887. **Ahirwar, Ramesh Kumar 2011.** “Ethnomedicinal plants studies in Jaitpur Forest Range of Shahdol District, Central India.” *Advances Pl. Sci.* 24(II): 681–684. Abstract: The paper deals with 41 angiospermic plant species having medicinal values. Attempts have been made to collect information by approaching different agencies. Shahdol is one of the hilly and tribal district of Madhya Pradesh. A large number of plants have been used in different diseases by local inhabitants. Botanical names, local name, families and uses in different diseases are given parenthetically.
888. **Ahirwar, Ramesh Kumar 2014.** “Utilization of medicinal plants by the tribes of Bhatiya, district Shahdol, Madhya Pradesh”. *Int. J. Sci.&Res.* 3(9): 149–151. Abstract: Study area of Bhatiya, district-Shahdol (M.P.) there are hundreds of medicinal plants that have a long history of curative properties against various diseases and ailments. The present paper reports 10 plant species of 10 Families are used by the indigenous people for several common diseases like bronchitis, leprosy, cough, skin, disease etc. Documentation of such knowledge is important to evaluate culture and protection exert on local biodiversity.
889. **Ahirwar, Ramesh Kumar 2015.** *Indian Folk Medicinal Plants of District Mandla Madhya Pradesh: Indian Traditional Medicinal Plants.* Lambert Academic Publishing, Germany. Abstract: India is a rich folk medicinal plants heritage that is however disappearing due to modernization, technological developments and loss of natural habitats and over exploitation of natural resources. Though the study is restricted to medicinal plants diversity of Mandla district, its findings are to a great extent relevant to the herbal remedies among the natives of the neighbouring areas. Hence, this study will be a contribution to the ethnomedicinal of the region as a whole. The tribes of Mandla district utilize a large number of plants to cure human and cattle's diseases and all species of folk medicinal importance are mentioned in this book. The importance of this book for the scientific fraternity as well as the common people was kept in mind while describing them. Hence, the description of each plant is grouped under eight categories, viz. botanical name, local name, family occurrence and status, botanical description with flowering and fruiting and medicinal importance. Efforts are made to describe the salient feature of herbs for better identification and documentation.
890. **Ahirwar, Ramesh Kumar. 2015.** “Indigenous knowledge of traditional magico-religious beliefs plants of district Anuppur, Madhya Pradesh India”. *Amer. J. Ethnomed.* 2(2): 103–109. Abstract: The present paper highlights some traditional magico-religious beliefs. They believe that some Gods and deities reside in forests. So they conserve some plant species due to the traditional magico-religious plants species attached resulting

in some patches of forest being conserved. The paper deals with traditional magico-religious beliefs plants of the district Anuppur tribals of Madhya Pradesh fascinating natural forest conservation.

891. **Ahirwar, Ramesh Kumar. 2015.** "Diversity of ethnomedicinal plants in Boridand Forest of district Korea, Chhattisgarh, India". *Amer. J. Pl. Sci.* 6: 413–425. Abstract: Present study deals with an extensive ecological assessment of natural forest areas under several in-situ conservation plots which have resulted from high rate of grazing and biotic pressure. Over-exploitation of forest and unwanted incidental fire cases decreased the diversity of several ethno-medicinally and economically valuable plants species from the Boridand forest region in Korea district, Chhattisgarh. The total number of plants reported in all three study sites, 41 plants species belonging to 26 families and 37 plant genera were identified. A field survey was conducted at three different study sites in Boridand forest, district Korea, Chhattisgarh as Plot A, Plot B and Plot C, during months March 2013 to February 2014 to identify the diversity of ethnomedicinal plants.
892. **Ahirwar, Ramesh Kumar. 2015.** "Ethnomedicinal plants used by the tribes of Anuppur district, Madhya Pradesh, Central India". *Int. J. Curr. Res. Biosci. Pl. Biol.* 2(7): 26–29. Abstract: In the present study 31 ethnomedicinal plants have been identified for the treatment of various diseases. Herbarium has been prepared which contains information pertaining to botanical name, local name, plants used, their dose and process of administration. A survey of ethnomedicinal plants of district Anuppur has been carried out with co-operation of tribal villagers.
893. **Ahirwar, Ramesh Kumar. 2016.** "Ethnobotany of medicinal plants used by tribes community in Korea, Chhattisgarh, India". *Imperial J. Interdisciplinary Res.* 3(1): 744–747. Abstract: The present paper deals with 30 ethnomedicinal plants have been identified for the treatment of various diseases. Herbarium has been prepared which contains information pertaining to botanical name, local name, plants used, their dose and process of administration.
894. **Ahirwar, Ramesh Kumar. 2016.** "Study of some traditional wild edible plants used by Baiga tribes of Amarkantak region, Madhya Pradesh". *Ethnobotany* 28: 49–52. Abstract: The present survey highlights some traditional wild edible plants used by Baiga tribes in Amarkantak region. These survey results include 40 plant species and 28 families of the angiosperms. The botanical names, local names along with parts used are furnished in this paper.
895. **Ahirwar, Ramesh Kumar. 2017.** "Unreported ethnomedicinal plants used by Baigas in Baiga-Chak area of district Dindori, Madhya Pradesh, India". *J. Non-Timber Forest Prod.* 24(3): 159–162. Abstract: The paper contains information on 30 ethnomedicinal plants used by the Baiga tribe of Baiga-Chak area in district Dindori, Madhya Pradesh

was collected through interviews and discussion regarding the plant prescribed, such as part of the plant used, medicinal uses, and detail information about mode of preparation, form of usage and method of application. A total of 30 species belonging to 29 genera and 23 families to treat various ailments. The documented medicinal plants were mostly used to cure cold, cough, diabetes, dysentery and skin diseases, etc. According to the informants the indigenous knowledge is drastically disappearing, the younger generations are not interested to practice traditional medicine due to the changes in life style and the intervention of modern medicine. Hence the documentation of traditional knowledge among the ethnic people is essential to the betterment of our future generation, since most of the lives saving medicines are derived based on ethnic wisdom of this traditional community those who directly depend on plants for their survival.

896. **Ahirwar, Ramesh Kumar. 2017.** "Ethnomedicinal investigations among the Baiga tribes, district Anuppur, Madhya Pradesh, India". *Nelumbo* 59(2): 181–186. Abstract: The ethnobotanical study was carried out among the ethnic group (Baiga tribe) in the Anuppur district of Madhya Pradesh during January 2015 to January 2016 to document the medicinal plants used by the Baiga tribe. Traditional uses of 68 plant species belonging to 44 genera and 39 families used to cure skin diseases, diarrhoea, jaundice, cough, wounds, piles, urinary troubles, asthma, tuberculosis, snakebite, gynaecological problems, heart diseases and as an eye drop are reported here.
897. **Ahirwar, Ramesh Kumar. 2017.** "Less known uses of some ethnomedicinal plants of family Leguminosae of district Anuppur, Madhya Pradesh". *Phytotaxonomy* 17: 81–83. Abstract: Ethnobotanical studies of district Anuppur reports the present uses of plants by the local tribes. This paper deals with uses of nineteen species of the family Leguminosae collected during ethnobotanical survey of district Anuppur in Madhya Pradesh state which are not recorded so far.
898. **Ahirwar, Ramesh Kumar. 2017.** "Ethnomedicinal plants used for treatment of poisonous bites by the Baiga tribes of district Dindori, Madhya Pradesh". *Ethnobotany* 29: 69–72. Abstract: The present paper deals with 30 species of plants covering 30 genera and 18 families used in treatment of poisonous bites by the Baiga tribes of district Dindori, Madhya Pradesh. The Baiga tribes practise to treat different types of poisonous bites such as snake bite, scorpion bite and dog bite by use of these medicinal plants to cure.
899. **Ahirwar, Ramesh Kumar. 2018.** "Ethnomedicinal plants used by Baiga tribe of Chanda, Madhya Pradesh". *J. Non-Timber Forest Prod.* 25(1): 19–22. Abstract: The paper provides ethnomedicinal uses of 83 plant species used for curing various diseases by the Baiga tribe of the Chanda village of Dindori district, Madhya Pradesh. The botanical names, local names along with the part of the plant used, dosage, mode of drug preparation and administration are described.
900. **Ahirwar, Ramesh Kumar. 2018.** "Ethnomedicinal plants used by Baiga tribe of district

Dindori, Madhya Pradesh". *Indian Forester* 144(4): 363–367. Abstract: Present paper reports the ethnomedicinal uses of 68 plants belonging to 60 genera and 43 families used for curing various diseases by the Baiga tribes of district Dindori, Madhya Pradesh. The botanical names, local names and family names of these plants, used dosages, mode of drug preparation and administration are prescribed.

901. **Ahirwar, Ramesh Kumar & Kapali, R. 2014.** "A survey of traditional health care practices of the Tribals of Dindori District, Madhya Pradesh". *Indian J. Appl. Pure Biol.* 29(1): 77–80. Abstract: This study has been conducted among Baiga primitive tribals of Anuppur District, Madhya Pradesh. Ethnomedicine has long been recognized as an important field of medicinal research. Ethnomedicinal study of disease and illness from ecological and epidemiological points of view to understand the distribution of diseases and their relationship with socio-cultural and environmental factors, have helped in the emergence of several ideas and formulations of present day ethnobotany. In every society, particularly in tribal societies, the people are found to have certain cultural practices to keep their health in good condition. The primitive man must have used things which he was able to procure most easily as therapeutic agents and remedial measures. In ancient times, the health disorders were interpreted in a cosmological and botanical perspective. Medicine was dominated by magical and religious beliefs which were an integral part of the ancient cultures and civilizations. The concept of disease, in which the ancient man believed, is known as the supernatural theory of disease. The present paper deals with species of plants used by the said tribals in the treatment of malaria (*Andrographis paniculata*); Fractured bones (*Vitis quadrangularis*); Lactation deficiency (*Asparagus racemosus*); fever (*Tinospora cordifolia*); cough & cold (*Terminalia chebula*); Stomachache (*Operculina trurpethum*); bronchial problems (*Zingiber officinale*); diarrhoea and dysentery (*Acacia nilotica*); and toothache (*Calotropis gigantea*). Mode of administration has also been dealt with in brief.
902. **Ahirwar, Ramesh Kumar & Kujur, Manoj. 2015.** "Ethnomedicines for jaundice used in tribal areas of Ghunghuti forest, district Umaria, Madhya Pradesh, Central India". *Int. J. Curr. Res. Biosci. Pl. Biol.* 2(11): 31–35. Abstract: The present paper deals with ethnomedicinal use of 25 antiviral hepatitic plant species occurring in hilly forest of Ghunghuti, district Umaria, Madhya Pradesh Central India. In the study area, more than a dozen plants are used in different parts of the state by natives like Baiga, Gond and Bhumia as remedy for this disease. Some of which are less known, but very effective. The present study enumerated 25 ethnomedicinal plants used in treatment of jaundice by tribals of Ghunghuti forest.
903. **Ahirwar, Ramesh Kumar & Shakya, Vijay Singh. 2015.** "An ethnobotanical survey of some wild edible plants of Bijuri Forest district Anuppur, Madhya Pradesh, Central India". *Int. J. Sci. & Res.* 4(6): 1641–1643. Abstract: The present paper highlights in Bijuri forest

District Anuppur, Madhya Pradesh about 33 wild edible plants species which provide food and vegetables to inhabiting Tribes. The data collected have been pooled and present in tabular form and they have been collecting various types of plants for food, fodder, fuel, medicine etc., and Bijuri forest represents a diversity of ecosystem, communities and species. The inhabitants have much percentage of many types of tribes.

904. **Ahirwar, Ramesh Kumar & Shakya, Vijay Singh. 2015.** "Investigation of some ethnobotanical plants used by tribals of district Shahdol, Madhya Pradesh, Central India". *Int. J. Advances Res. Biol. Sci.* 2(8): 29–34. Abstract: Present paper deals with 30 ethnobotanical plants have been identified for the treatment of various diseases. Herbarium has been prepared which contains information pertaining to botanical name, local name, plants used, their dose and process of administration. A survey of ethnobotanical plants of Shahdol district has been carried out with co-operation of Tribal villagers.
905. **Ahirwar, Ramesh Kumar & Shakya, Vijay Singh. 2015.** "Indigenous ethnomedicinal plants used by Baiga tribes in district Mandla, Madhya Pradesh, Central India". *Int. J. Sci. & Res.* 4(6): 2867–2870. Abstract: Present paper deals with indigenous ethnomedicinal survey were carried out in Baiga tribes villages of Madhya Pradesh on various aspect of tribal people which are commonly used by tribal peoples of Mandla district. The Botanical, local and family names of these plants along with the parts used and mode of administration are enumerated. The Baiga tribes of Madhya Pradesh is known for is its unique social, cultural and traditional aspects. Baiga villages mainly found in natural places and Baiga peoples also called of nature this paper aims to documented ethnomedicinal plant mainly used by Baiga peoples for their disease and other disorders.
906. **Ahirwar, Ramesh Kumar & Sandya, Ganesh Singh. 2015.** "Multifarious plants uses in various diseases by tribes of Amarkantak plateau district Anuppur (M.P.) India". *Int. J. Sci. & Res.* 4(2): 1806–1808. Abstract: The paper highlighted of some important medicinal plants which are used in various disease by the tribals. Anuppur is one of the important district of Madhya Pradesh, for forest resources. The district is mainly inhabited by people, belonging to scheduled cast and scheduled tribes. They depend much upon the forest and forest products, for their various daily needs, particularly medicines. During present survey and collection, an attempt has been made to score the folklores pertaining to the medicinal utility of these plants. 30 plants species of angiosperms are enumerated. The botanical names, families, local names, locality of collection and distribution are given along with their medicinal uses.
907. **Ahirwar, Ramesh Kumar & Sandya, Kumud. 2015.** "Documentation of some threatened ethnomedicinal plants used by the tribes of Achanakmar-Amarkantak Biosphere Reserve,



- central India". *Int. J. Curr. Microbiol. Appl. Sci.* 4(8): 804–811. Abstract: Present paper highlights some threatened ethnomedicinal plants uses of 33 plant species belonging to 33 genera and 26 families used by the tribal communities of Achanakmar- Amarkantak Biosphere Reserve (AABR), Central India. Present Ethnomedicinal survey was conducted in the remote villages of Achanakmar- Amarkantak Biosphere Reserve (AABR) during the period 2012-2013. These plants are mostly used to different types of diseases like fever, diarrhoea, dysentery, Piles, joint pain, wounds, healings, asthma, bronchitis, cough, snake bite, abortifacient, memories, Cardiac disease, kidney trouble, urinary diseases, skin problem and Jaundice etc. Part of the plant used, dosage, mode of drug preparation and administration in different ailments and diseases are described. The plants species have been arranged alphabetically with their family, local name and ethnomedicinal uses.
908. **Ahirwar, Ramesh Kumar & Sandya, Kumud. 2015.** "Ethnobotany and ethnoveterinary plants used for wounds healing by Baiga tribes for Umaria district, Madhya Pradesh, India". *Int. J. Pharm. & Pharmaceut. Res.* 4(1): 159–166. Abstract: Present paper deals with 24 plants species and presenting here botanical name followed by local names and along with parts used are furnished. Present survey in 2013-2014, ethnobotany and ethnoveterinary plants was carried out in the tribal area. District Umaria is located in the central part of Madhya Pradesh. It has three tehsil namely Pali, Umaria and Manpur. The Tribes are densely populated in the study area Baiga tribes are the dominant tribes inhabiting in Umaria district.
909. **Ahirwar, Ramesh Kumar & Singh, Girja Kumar 2011.** "Some antidiabetic plants from Dindori district of Madhya Pradesh (India)". *Indian J. Appl. Pure Biol.* 26(2): 269–271. Abstract: The Present study deals with the state of Madhya Pradesh in Dindori District indigenous plant therapy upon diabetes is well informed. Today in India, diabetes has been concerned as a disease of common People. In this paper the same has been reported in relation to oral administration lead on 15 plants species.
910. **Ahirwar, Ramesh Kumar & Singh, Girja Kumar 2015.** "Ethnomedicinal practices of Koltribes in Shahdol Division, Madhya Pradesh, India". *Int. J. Sci. & Res.* 4(1): 2696–2698. Abstract: A survey of ethnomedicinal plants of Shahdol division has been carried out with co-operation of Kol tribal villagers. During study 31 ethnomedicinal plants have been identified for the treatment of various disease. Herbarium has been prepared which contains information pertaining to botanical name, local name. Plants used their dose and process of administration.
911. **Ahirwar, Ramesh Kumar, Parna, I.C. & Singh, G.K. 2012.** "Diversity and conservation of medicinal plants in district Anuppur M.P. (India)". *Indian J. Appl. Pure Biol.* 27(1): 43–48. Abstract: An ethnobotanical survey of Anuppur District, about 38 naturally growing

and frequently used medicinal plants were collected. The collection of only 38 plants species have been highly prioritized for conservation. During the exploration, emphasis was given on herbal treatment for everyday common ailments and diseases, particularly used by the local tribes of Anuppur District. The study gives an account on the diversity of medicinal plants and priority medicinal plants for conservation. The study also warrants an herbal policy to address public awareness, cultivation and conservation on a sustainable basis with in the environmental protection.

912. **Ahirwar, Ramesh Kumar, Sandya, Ganesh Singh & Sandya, Kumud. 2015.** "Folk medicinal uses of some plants to cure rabies disease in Mandla district, Madhya Pradesh, India". *Int. J. Sci. & Res.* 4(1): 2759–2762. Abstract: An ethnomedicinal survey on folk medicinal used by different ethnic groups in Mandla district, Madhya Pradesh was done. Field survey and personal discussion methods were used in the collection of data this research paper. A total of only 09 (Nine) species were used as folk medicinal plants curing to rabies disease. Mostly prevalent disease in this area rabies (Hydrophobia) and value of folk medicines Plants with their local names and ethnomedicinal claims including method of application to treat common illness are presented. These plants species are used as folk medicines against rabies, after dog bite by tribals and common people of Mandla district.
913. **Ahmad, Faizi. 2016.** "Studies on some indigenous ethnomedicinal plant resources used by the tribals of Mahakaushal region to treat fever". *Phytotaxonomy* 16: 131–134. Abstract: In the present investigation, 15 ethnomedicinal plant species of Mahakaushal region, Madhya Pradesh have been documented which are used for the treatment of fevers. Various parts of plants are taken internally as decoction or paste. They are either mixed with other ingredients or used singly. These plants have been enumerated with their botanical names, families, local names, part used and their medicinal uses.
914. **Ahmad, Faizi. 2017.** "Studies on some indigenous ethnomedicinal plant resources used by the tribals of Mahakaushal region to treat fever". *Ethnobotany* 29: 64–68. Abstract: In the present investigation, 15 ethnomedicinal plant species of Mahakaushal region, Madhya Pradesh have been documented which are used for the treatment of fevers. Various parts of plants are taken internally as decoction or paste. They are either mixed with other ingredients or used singly. These plants have been enumerated with their botanical names, families, local names, part used and their medicinal uses.
915. **Ahmad, Faizi, Tiwari, Shashi & Awasthi, Aparna. 2016.** "Chthonic knowledge of traditional magico religious plant beliefs among tribals of Jabalpur region, MP". *Ethnobotany* 28: 60–67. Abstract: The present paper highlights some traditional magico-religious plants belief. The native tribals of Jabalpur region belief that Gods and deities reside in forests, so they conserve some plant species. Due to the traditional magico-religious beliefs attached with some plant species in results in conservation of forest

area where these plants are found. The paper deals with traditional magico-religious beliefs in plants among indigenous tribal communities of Jabalpur region (Madhya Pradesh) fascinating natural forest conservation.

916. **Ahmad, Faizi, Tiwari, Shashi & Awasthi, Aparna. 2014.** "Ethno-medicinal plant resources of Jabalpur region used by traditional healers". *Life Sci. Bull.* 11(1): 27–30. Abstract: In the present investigation, 24 medicinal plant have been worked out which are used for the treatment of various diseases like asthma, piles, diabetes, snake bites, skin diseases, ulcer, stomach pain, cough, headache, anemia, rheumatism, purgative, dysentery, leprosy, laxative, astringent, urinary disorder, paralysis, scabies, diarrhoea and diuretic etc. Some of them are used as anthelmintic and antiseptic also. 24 plant species belonging to 17 families were reported in which rock, bark, latex, leaves, fruits and seeds were used medicinally. These are taken internally and applied externally as decoction, paste or powder. Most of the plants used as medicine are either mixed with other ingredients or used singly. Medicinal plants have been enumerated with their botanical name, families name, local name, part used and ethano medicinal uses. Some important medicinal plants needs immediate conservation and their cultivation should be encouraged through which their extinction can be prevented and local village people may also get low-cost cure of their diseases.
917. **Ahmad, J. & Chaghtai, S.A. 1982.** "A study of tree flora of Bhopal with special reference to their medicinal values". *Bull. Med.-Ethno-Bot. Res.* 3(1): 114–152.
918. **Ahmad, Z., Khan, F., Khan, S.S., Tanveer, A. & Khan, M. 2010.** "Ethnomedicinal studies of some important plants used in the treatment of sexual diseases in Raisen (M.P.)". *Life Sci. Bull.* 7(1): 57–58.
919. **Ahmad, Z., Khan, F., Khan, S.S., Tanveer, A. & Khan, M. 2010.** "Multifarious ethnomedicinal uses of some plants of district Raisen of M. P., India". *Pl. Archives* 10(1): 449–452. Abstract: The present paper deals with the preliminary investigation carried out among the Gond tribals of Raisen district of M.P., India. The paper deals with ethnomedicinal uses of sixteen species of angiospermic plants which find their use in alleviation of various health disorders prevalent among the Gond tribals of this area. There is a brief account of the plant part used, the mode of administration and the disease against which a particular plant species is used. Every plant recorded has specific utility for the treatment of a particular disease, the knowledge of which is based on generations of experience there are species of plants used in diabetes, stomach ache, bone fractures, renal calculi, cancer, cough, cold and skin disorders.
920. **Ahmad, Z., Khan, S.S., Khan, F. & Siddiqui, S. 2012.** "Studies on the ethnobotanical and ethnomedicinal uses of the plants of the family Euphorbiaceae of Raisen district (MP), India". *Sci. Secure J. Biotechnol.* 1(2): 43–46.

921. **Ahmad, Z., Khan, S.S., Wani, A.A. & Khan, F. 2013.** "Ethnomedicinal plants used for different ailments by the tribals of district Raisen (M.P.), India". *J. Med. Pl. Res.* 7(7): 298–303. Abstract: The present investigation was carried out for documentation of native medicinal plants which are exploited for medicinal purposes in the Raisen district of Madhya Pradesh. The district is rich in repository economically as well as ethnomedicinally for important for plants. Information was collected from tribals using interview and semi-structural questionnaires among the traditional medicine men of the area. First-hand information on ethnomedicinal uses of plants, part used, mode of administration, botanical name, and family is enlisted in the paper which deals with 25 medicinal plants used for different dreaded diseases like diabetes, cancer, sexual disorders, ulcers, etc. These plants are arranged alphabetically in table.
922. **Alawa, K.S. 2014.** *Ethnobotanical studies of Dhar district (M.P.)*. Ph.D. Thesis, Devi Ahlia Vishwavidyalaya, Indore. Madhya Pradesh (Unpublished).
923. **Alawa, K.S. & Ray, Sudip. 2012.** "Ethnomedicinal plants used by tribals of Dhar district, Madhya Pradesh, India". *CIBTech J. Pharmaceut. Sci.* 1(2-3): 7–15. Abstract: Dhar district is known as one of the tribal district of Madhya Pradesh where 54 percent of total populations belong to tribal community. Bhil, Bhilala Barela and Patelia are the main tribals of study area and totally dependent on medicinal plants for their daily health care need. Present paper deals with 86 ethnomedicinal plants which are belong to 71 genera and 47 families used for 35 types of diseases.
924. **Alawa, K.S. & Ray, S. 2016.** "Ethnobotany: some wild vegetable plants used by tribals of Dhar district, Madhya Pradesh". *Indian J. Appl. Pure Biol.* 31(1): 65–69. Abstract: The tribals living in remote forest areas with respected to food plants showed that tribals depend much upon forest products for their eaten a variety of wild vegetable plants. The paper deals with communicates first-hand information on 32 plant species belonging to 31 genera and 23 families were collected and identified. The information is based on an ethnobotanical field study of the district during 2012 to 2015. The tribals depend much upon forest products for their varies daily needs. The botanical names are arranged in alphabetical order, vernacular name and families, along with their plant part used and method to preparation is discussed. In all 32 plant species such utilized of vegetable, viz. *Abelmoschus ficulneus* (L.)Wt., *Amaranthus spinosa* L., *Argyreia nervosa* (Burm.f.)Bojer., *Bauhinia racemosa* Lam., *Celosia argentea* L., *Corchorus olitorius* L., *Cordia dichotoma* Forst. f., *Momordica dioica* Roxb.ex Willd., *Senna tora* (L.) Roxb. and *Wattakaka volubilis* (L.f.) Stapf. were observed.
925. **Alawa, K.S., Ray, Sudip & Dubey, Anuradha. 2016.** "Folklore claims of some ethnomedicinal plants used by Bhil tribes of Dhar district, Madhya Pradesh". *Biosci. Disc.* 7(1): 60–62. Abstract: An ethnobotanical survey was carried out during 2012-2014 in the some ethnomedicinal plants used by tribal communities of Dhar district, Madhya

Pradesh. The present paper exclusively deals with the Bhil tribe folk medicinal plants which are used for treating various ailments and disease in their day to day life. They are settled agriculturist and have a very rich knowledge on plant based resources utilization for their survival since time immemorial. During the investigation it has recorded 24 plant species belonging to 24 genera and 21 families which are widely used as medicines by this ethnic community. Some plants used for other purposes are also mentioned.

926. **Anis, M., Sharma, M.P. & Iqbal, M. 2000.** "Herbal ethnomedicine of the Gwalior forest division in Madhya Pradesh, India". *Pharmaceut. Biol.* 38(4): 241–253. Abstract: Ethnomedicinal studies carried out in the Gwalior Forest Division, Madhya Pradesh, India, led to interesting therapeutic applications of 102 plant species. Information on medicinal claims was collected from the tribal people called 'Sahariya' and the traditional healers who had knowledge of the traditional uses of medicinal plants. This study describes details of botanical identity, local name, parts of the plants used, mode of preparation, administration of the drug, and diseases for which the given plants are used.
927. **Anjum, T.& Hasan, Z. 2013.** "*Gymnema sylvestre* plant used by peoples of Vidisha district for the treatment of diabetes". *Int. J. Engineering Sci. Invention* 2(6): 98–102. Abstract: *Gymnema sylvestre* is regarded as one of the plant with potent property. Leaves of this plant is used by peoples of Vidisha district for treatment of diabetes. The active compound of this plant is a group of acids termed as GYMNEMIC ACID. Gymnemic acid have antidiabetic, antisweetner, and anti inflammatory activities. The phytoconstituents of *Gymnema sylvestre* were isolated and their chemistry and structures were studied and elucidated. The result of this investigation will be helpful for the correct botanical identification of plant and also different sources of medicine and pharmaceutical industry.
928. **Anonymous. 1980.** "Medico-ethno-botanical survey of Surguja district, Madhya Pradesh". *Newsletter CCRAS* 2(21): 1–7.
929. **Anonymous. 1981.** "Medico-ethno-botanical, health and medicare research programme of Surguja". *Newsletter CCRAS* 3(6): 1–6.
930. **Anonymous. 1985.** "Ethnobotany of Baiga of Madhya Pradesh". *NBRI Newsletter* 12: 28–29.
931. **Anonymous. 2003.** *Threat assessment & management prioritization for the medicinal plants of Chhattisgarh and Madhya Pradesh*. Foundation for Revitalization of Local Health Traditions, Bangalore, India.
932. **Ansari, T.& Saini, V. 2016.** "Study of some less known ethnomedicinal plants used by traditional healers in Jablapure region". *Life Sci. Bull.* 13(2): 149–152. Abstract: The present communication deals with thirty (30) angiosperm plant species of ethnomedicinal plant used by the traditional healers of Jabalpure region. Through a survey during

2010-2011 first hand information on ethnomedicinal preparation dosage and their mode of administration was gathered, from herbal practitioners of local people. In this work, ethnomedicinal information on 30 plant species belonging to 15 families and 15 genera was documented by interrogating the local traditional practitioners concerned scientific names along with their family, vernacular names, part used and diseases, cured by these plants have been discussed.

933. **Arjariya, A. & Chaurasia, A. 2014.** "An ethnobotanical flora from rheumatism at Chitrakoot district (M.P.)". *Scholars Impact* 1(1): 25–29. Abstract: Rheumatism is a painful joint disease. It is more frequent in female, due to an abnormal uric acid metabolism. The cause is raised serum uric acid level and deposition of uric acid crystal in cartilage of joints, resulting in recurrent attacks of pain and inflammations. Modern medicines do not have any cure for this disease, except their prevention and temporary relief. However, traditional herbal remedies do have a cure. A decoction, oral powder, herbal oil or hot formulation prepared from some household herbs is an excellent remedy for rheumatism, which is discussed in the present paper.
934. **Arjariya, A. & Chaurasiya, Kalpana. 2008.** "Phytosociological study of some ethnomedicinal plants at Chhatarpur district (M.P.), India". *J. Bot. Soc. Univ. Sagar* 43: 126–133. Abstract: The paper describes some phytosociological and ethnomedicinal aspects of 145 plant species Chhatarpur region of M.P. Survey was conducted in Chhatarpur district during 2006 to 2008. The plants which are common in the district are used by different tribal viz. Gond, Kondar & Bedia are listed here. The people of this region use these plant species by crude method.
935. **Awasthi, U. & Chaturvedi, H.K. 2004.** "Ethnoecological studies on Baiga tribe with special reference to medicinal plants used for cattles at Sidhi District (M.P.)". *J. Bot. Soc. Univ. Sagar* 39: 28–31. Abstract: Sidhi district is numerically the largest with regard to the tribal communities where 17 tribes are residing in forest villages. The forest systems provide life supporting system to the Baiga population. Baiga utilize a large number of wild as well as cultivated plants as medicines as cattles at Sibhi district. The use of 21 species of medicinal wild as well as cultivated plants have been described with reference to specific plant parts used in the cure of 9 cattle diseases.
936. **Badaya, A.K., Sahu, B. & Ambawatia, G.R. 2007.** Survey and documentation of indigenous knowledge of tribal farmers of Jhabua region for plant protection. In: Sahu, T.R. (Ed.), *Indigenous knowledge: An application*. Scientific Publishers, Jodhpur, pp. 149–152.
937. **Bajpai, H.R. & Mitra, M. 1997.** "Indigenous medicinal practices of Hill Korwas of Madhya Pradesh". *J. Human Ecol.* 9(3): 295. Abstract: The data regarding the indigenous medical practices of Hill Korwa have been collected by interviewing fifteen old members and three medicinemen (Baiga) from three villages of Raigarh district. Madhya Pradesh.

938. **Bala, Lipika Devi & Singh, Ravindra 2015.** "Observation of medicinal importance of sacred plants of Chitrakoot region Satna (M.P.)". *Int. J. Sci. & Res.* 4(8): 1783–1787. Abstract: The present paper deals 13 sacred plants species which are medicinally used by the tribes of Chitrakoot region district Satna Madhya Pradesh. The local people believe in the efficacy of these herbs along with some divine power, but the knowledge is restricted to very few elderly folks only. Therefore, this valuable information needs to be systematically collected, documented and preserved so that it can serve the mankind in generation to come and will also act as an important tool in conserving and preserving the traditional usages of these precious plant resources of high economic value. The collected information has been documented and presented in the current study.
939. **Bala, Lipika Devi & Singh, Ravindra 2016.** "Ethnobotanical study of traditional medicinal plants used by Mawasi tribe of Chitrakoot region district Satna (M.P.)India". *Int. J. Biol. Res.* 1(3): 13–15. Abstract:Ethno-botanical study on traditional medicinal plants was conducted between 2014-2015 in Chitrakoot district Satna of Madhya Pradesh, India and documented different types of traditional medicinal plants used by the indigenous peoples. The study was focused on identifying medicinal plants, disease treated, part of the plant used, methods of preparation, route of administration, ingredients added etc. The data was collected using interview and questionnaires by selecting 16 healers using purposive sampling method. A total of 32 medicinal plant species were collected and identified from the study area for treating various human ailments. The paper enumerates these medicinal plant species belonging to 26 genera and 18 families.
940. **Bala, Lipika Devi & Singh, Ravindra 2016.** "An ethnobotanical study of medicinal plants in Chitrakoot area district Satna, Madhya Pradesh, India". *Int. J. Bot. Stud.* 1(5): 14–18. Abstract: An ethnobotanical study was conducted from July 2015 to June 2016 to investigation the uses of medicinal plants by people of Chitrakoot, district Satna, Madhya Pradesh. The information about the medicinal uses of personal interviews of rural peoples. The present paper reported 57 medicinal plants belonging to 37 families and 53 genera. The information of medicinal plant was collected by local people of Chitrakoot area, of Vindhya region. These medicinal plants are used by the Rural peoples for the treatments of various disease like anemia, aphrodisiac, jaundice, small pox, leprosy, antiseptic cough, sores, skin disease, cancer, piles, diarrhoea, diuretic, low blood presser, dysentery, headache, diabetes, asthma, toothache, purify blood, sedative, gonnorrhoea, fever, madness, disorders, ulcer, urinary, discharges and many diseases. The present paper focused on medicinal uses of Plants.
941. **Banik, A. & Nema, S. 2014.** "Ethnomedicinal practices and indigenous household remedies used by the tribals and rurals of the Baster region (Chhattisgarh)". *Indian Forester* 140(2): 192–200. Abstract: Identification and documentation of plant diversity used by the tribal;s of bastar region for ethnomedicinal practices and indigenous remedies

was studied during the year 2012. A total of 103 ethnomedicinal plant species belonging to 50 families were used traditionally to cure various diseases/ailments by the tribal's. Various parts of these species were used to cure cough, cold, fever, skin diseases, stomach problems, healing wounds, etc. Such studies would help in developing a comprehensive database used in the traditional medicinal practices, strengthening the health care system in the villages and also conserving the traditional knowledge of tribal's of Bastar region in Chhattisgarh state. The scientific names, local names and family of these plant species, along with the parts used and the mode of usage are enumerated.

942. **Baroniya, M.B., Shrivastava, N.K. & Baroniya, S.S. 2013.** "Various ethno-medicinal plants of Malwa regions used in stomach ailments". *Int. J. Innovat. Res. Developm.* 2(5): 1662–1671.
943. **Bawistale, O., Sahu, B. & Sahu, P. 2010.** "Some plants in folk medicine of Chhindwara district, Madhya Pradesh". *Ann. Pharmacy & Pharmaceut. Sci.* 1(2): 106–108. Abstract: Hitherto unknown uses of 34 plant species in the treatment of antivenom, eczema, leucorrhoea, piles, pyorrhoea, asthma, ophthalmia, hernia, enteric fever and other diseases by the tribals and rural people of Chhindwara district of Madhya Pradesh are reported.
944. **Bawistale, O., Sahu, T.R., Sahu, P. & Sahu, B. 2010.** "Medicinal importance of the grasses of Chhindwara district (M.P.)". *Int. J. Pl. Sci.* 5(2): 696–697. Abstract: Grasses are, economically the most important group of plants: they belong to family poaceae and provide major and minor cereals, fodder and raw material of papers, medicine, drugs etc. The tribal and rural people of Chhindwara district use different parts of grasses in crude form as cure for many diseases. This paper deals with 18 grass species used in fungal infection, haematuria, urinary diseases, intestinal worm, fever, cough, bodyache, wounds, snakebite, gonorrhoea etc.
945. **Bhalla, N.P. & Bhalla, Suman. 2005.** "Ethnomedicine and ecophysiological studies in Fabaceae (Leguminosae) of Sagar district". *J. Econ. Taxon. Bot.* 29(3): 637–654. Abstract: Plants of family Leguminosae of Sagar district (Madhya Pradesh) used in various diseases by tribals are discussed in this paper with special reference to genus *Indigofera* and *Alysicarpus*. Phytochemical, pharmacological and seed germination studies have also been discussed for these two genera.
946. **Bhalla, N.P. & Bhalla, Suman. 2007.** "Flavonoids of ethnomedicinal herbal legumes of Bundelkhand region (Madhya Pradesh)". *J. Bot. Soc. Univ. Sagar* 42: 123–128. Abstract: Some plants which contain flavonoids have been reported pharmacologically active. Due to great ethnomedicinal importance and high nutritive value. 10 species of *Indigofera* and 9 species of *Alysicarpus* were selected for the analysis of flavonoids. Considered species of *Indigofera* and *Alysicarpus* showed better distribution of flavonoids. These species may be supposed to be active pharmacologically due to presence of these



flavonoids.

947. **Bhalla, N.P. & Bhalla, Suman. 2008.** "Ethnomedicinal study of some wild herbal plant species of Sagar, Central India". *J. Bot. Soc. Univ. Sagar* 43: 1–5. Abstract: Native uses of 36 wild herbal plant species of Sagar (Central India) are described in this paper.
948. **Bhalla, N.P. & Bhalla, Suman. 2008.** "Anti-inflammatory activity of two ethnomedicinal herbal plant species of central India". *J. Bot. Soc. Univ. Sagar* 43: 52–56. Abstract: Present research paper deals with the anti-inflammatory activity of two ethnomedicinally important herbal plant species of central India. The plant extract evaluated by carragenan induced hind paw method. Mature albino rats were taken for this purpose. Results clearly state that *Glossocardia bosvallea* (L.F.) DC. and *Bidens biternata* (Lour) Merr. & Sheriff plant species can be used as anti-inflammatory agent, when used in crude form.
949. **Bhalla, N.P. & Bhalla, Suman. 2009.** Ethnomedicinal studies on genus *Alysicarpus* from Bundelkhand region". In: Singh, V. (Ed.), *Ethnobotany and medicinal plants of India and Nepal – Vol. 3*. Scientific Publishers, Jodhpur. Pp. 217–219. Abstract: An ethnomedicinal survey of the tribals and rurals of Bundelkhand region has been made. Seven *Alysicarpus* Desv. species have been recorded which are being used by the local people for curing various ailments. Information on local names, part used and method of administration for each species is given.
950. **Bhalla, N.P. & Bhalla, Suman. 2009.** "Ethnomedicinal studies on genus *Alysicarpus* from Bundelkhand region". *J. Econ. Taxon. Bot.* 33(Suppl.): 217–219. Abstract: An ethnomedicinal survey of the tribals and rurals of Bundelkhand region has been made. Seven *Alysicarpus* Desv. species have been recorded which are being used by the local people for curing various ailments. Information on local names, part used and method of administration for each species is given.
951. **Bhalla, N.P., Bhalla, Suman & Jain, D. 2009.** "Antifungal screening of some ethnomedicinal herbal plants". In: Singh, V. (Ed.), *Ethnobotany and medicinal plants of India and Nepal – Vol. 3*. Scientific Publishers, Jodhpur. Pp. 157–162. Abstract: During ethnomedicinal survey herbal plant species were selected for the antifungal screening. These selected plant species were never screened before for their antifungal properties. During survey it was observed that *Balanites*, *Cocculus*, *Crotalaria* are used by rural and tribal people against many diseases of microbial origin. Results obtained by the screening of antifungal properties of these plants confirm the reports. Results obtained clearly suggest that all the studied three plant species can be used against one or other considered fungi.
952. **Bhalla, N.P., Bhalla, Suman & Khan, I.J. 2010.** "Ethnomedicinal studies of some wild plants of Asteraceae from Surguja district of Central India". *J. Econ. Taxon. Bot.* 34(4): 777–781. Abstract: After making the ethnomedicinal survey of the different selected

forests of Surguja district of central India, about 42 wild plant species of Asteraceae have been collected. During survey, the information collected from tribal and rural people of this area revealed that these species are used against 63 diseases in different ways.

953. **Bhalla, N.P., Sahu, T.R., Mishra, G.P. & Dakwale, R.N. 1982.** "Traditional plant medicines of Sagar district, Madhya Pradesh, India". *J. Econ. Taxon. Bot.* 3(1): 23–32. Abstract: The present paper deals with 98 medicinal plants of Sagar (M.P.). The available information with regard to native uses of these plants in the treatment of various diseases has been discussed.
954. **Bhalla, S., Patel, J.R. & Bhalla, N.P. 1992.** "Ethnomedicinal herbal legumes of Bundelkhand region, Madhya Pradesh". *J. Econ. Taxon. Bot., Addit. Ser.* 10: 105–109. Abstract: This paper describes the ethnomedicinal importance of 34 herbal leguminous plants common in Bundelkhand region of Madhya Pradesh. For each plant its popular name/local name and manner of use are described. Data are based on personal survey, observation and discussion with rural people of this region.
955. **Bhalla, S., Patel, J.R. & Bhalla, N.P. 1992.** "Ethnomedicinal studies of genus *Indigofera* from Bundelkhand region, Madhya Pradesh". *J. Econ. Taxon. Bot., Addit. Ser.* 10: 331–332. Abstract: An ethnomedicinal survey of the tribals and rurals of Bundelkhand region of Madhya Pradesh has been made. Eight *Indigofera* species have been recorded which are being used by the local people for curing various ailments. Information on local names, part used and method of administration for each species is given.
956. **Bhalla, S., Patel, J.R. & Bhalla, N.P. 1996.** "Ethnobotanical observation on some Asteraceae of Bundelkhand region, Madhya Pradesh". *J. Econ. Taxon. Bot., Addit. Ser.* 12: 175–178. Abstract: This paper describes the ethnomedicinal importance of 27 plants of Asteraceae in Bundelkhand region of Madhya Pradesh. Folklore claims of these plants were obtained during field studies. For each plant its popular name, local name and manner of use are described.
957. **Bharadwaj, A.K. & Rai, M.K. 2000.** Documentation on traditional knowledge of medicinal plants of indigenous people of Bastar (M.P.). In: Rai, M.K., Verma, A. & Rajak, R.C. (Eds.), *Integrated Management of Plant Resources*. Scientific Publishers, Jodhpur. Pp. 97–102.
958. **Bhargav, Bhupendra H. & Patel, Rakesh. 2017.** "Study of some ethnomedicinal climbers used by Bhil tribe of Alirajpur district, M.P.". *KAHV Int. J. Sci. Engineering & Technol.* 4(2): 104–109. Abstract: The Present study deals with ethno medicinal uses of climbers that are used by Bhils of Alirajpur district (M.P.). Comprehensive ethno medicinal survey conducted in different parts of Alirajpur district during 2009–2014. This study is based on spot study among tribals of the region. The ethno medicinal information gathered from vaidyas, ojhas, Badwas and other medicine men. Study shows that different plant parts such as leaves, roots, fruits, seeds etc. used traditionally in treatment of various

ailments by the tribal people. 34 climbers are used in traditional medicament. The plant species are enumerated alphabetically with their botanical names, family, local or folk name habit, plant part and medicinal uses.

959. **Bharti, R.P., Shrivastava, A., Choudhary, J.R., Tiwari, A. & Soni, N.K. 2013.** "Ethno medicinal plants used by tribal communities in Vindhya region of Rewa and Sidhi district of Madhya Pradesh, India". *IOSR J. Pharm. & Biol. Sci.* 8(6): 23–28. Abstract: The present study deals with the Ethno-medicinal plants used by tribal communities in Vindhya region of Rewa and Sidhi district of Madhya Pradesh India. An ethno medicinal survey was carried out the use of medicinal plants in Vindhya region, the information was gathered from Kol and goand tribes using an integrated approach botanical collections, group discussion and interview with questionnaire during 2012-13. Among 50 informants interviewed, 10 were tribal practitioners. A total of 26 Taxa belonging to 25 genera and 16 families are documented. In most of case, fresh parts of the plants was used for the prepararation of medicine. These tribal people still depend on the medicinal plants to cure their diseases and disorders in Vindhya forest region. The documented ethno medicinal plants were mostly used to cure wound infections, skin infections stomachache, fever, cough, diabetes, diuretics, diarrhea, eye infections and general weakness.
960. **Bharti, Vinay Kumar. 2015.** "Ethno-Medicinal plants used by the tribal people of Shahdol District, Madhya Pradesh for the treatment of rheumatism". *Int. J. Res. Appl. Sci. & Engineering Technol.* 3(11): 266–270. Abstract: The present study deals with survey on ethno-medicinal plants of Shahdol district in Madhya Pradesh. A good number of plant species are being used by tribal and rural people for the treatment of joint diseases e.g. rheumatism, gout and arthritis. In this study, 35 ethno medicinal plant species belonging to 32 families and 35 genera were recorded. Out of 35 plant species, 16 are used for curing arthritis 11 for rheumatism and 08 for gout. *Vitex negundo* is a popular herb frequently used by the local tribal people for many joint diseases.
961. **Bharti, Vinay Kumar. 2015.** "An ethnobotanical study of medicinal plants in Shahdol district of Madhya Pradesh". *Int. J. Sci. & Res.* 4(1): 1501–1505. Abstract: Shahdol district is known as one of the tribal district of Madhya Pradesh where 54 percent of total populations belong to tribal community. Gond, Panika, Bhariaand, Muria, Kol and Baiga are the main tribals of study area and totally dependent on medicinal plants for their daily health care need. Present paper deals with 80 ethnomedicinal plants which are belong to 70 genera and 45 families used for 34 types of diseases.
962. **Bhat, S.A. & Tiwari, S.C. 2011.** "Indigenous knowledge of communities of Achanakmar-Amarkantak Biosphere Reserve in utilization, conservation and sustainability of NTFP in Chhattisgarh (India)". *Indian Forester* 137(11): 1313–1320. Abstract: Indigenous knowledge plays an important role in sustainable development, being planned by scientists and planners who are striving for tribal development. The present paper examines

indigenous knowledge and its importance in utilization, conservation and management of natural resources among primitive tribal populations like Gond, Baiga, Kanwar, Uraon, Bhabha and Pahadi Korwa of Chhattisgarh with special reference of Achanakmar-Amarkantak Biosphere Reserve. There is an urgent need to document the existing indigenous knowledge of these deserted groups before it is totally lost and also to evaluate its value for biodiversity conservation. Indigenous knowledge may contribute to improve development strategies in several ways such as by helping identify cost-effective and sustainable mechanisms for poverty alleviation that are locally manageable and meaningful; by a better understanding of the complexities of sustainable development in its ecological and social diversity; and by helping innovative pathways to sustainable human development that enhance local communities and their environments.

963. **Bhatnagar, L.S., Singh, V.K. & Pandey, G. 1973.** "Medico-botanical studies on the flora of Ghatigaon forests, Gwalior, Madhya Pradesh". *J. Res. Indian Med.* 8(2): 67–100.
964. **Bhatnagar, P.2008.** "Potential of essential oils of Madhya Pradesh". *VanikiSandesh* 14(2): 15–18. Abstract: Essential oils have a variety of uses in our life. They are used in preparation of soaps, perfumes, flavouring agents, essences, etc. Rosha grass is the most important grass oil occurring in Khandwa and adjoining regions of the State. The paper attempts to list essential oils occurring in the State. The exploitation of these oils seems to be depleting in the absence of any organised cultivation or marketing channel. Efforts need to be made to enhance the production. Two other important oils- Keora and Khus have also been reported, in this write up.
965. **Bhatnagar, P.2016.** "Sustainable supply of medicinal plants through domestication in Madhya Pradesh". *J. Trop. Forest.* 32(1): 29–39. Abstract: Traditional medicine is one of the important health care systems practiced widely in India. A wide variety of medicinal plant species occur in Madhya Pradesh which is the second largest state in the country. The medicinal plant markets have grown tremendously in past few years in the state, but overexploitation has led to depletion of natural resources. A study was undertaken in Madhya Pradesh (Bhatnagar, 2010) to find out medicinal species in great demand by Indian systems of medicine (ISM) and the need for their domestication. Most of the ISM industries surveyed (n=371) revealed that out of 92 indigenous medicinal species utilized by Ayurvedic industries, 23 species were cultivated in farms. Thus, one fourth of medicinal plants are sourced from farms. Some medicinal species have been in cultivated sector in western Madhya Pradesh since decades like *Withaniasomnifera*, *Lepidium sativum*, *Plantago ovata*, *Mentha arvensis* and *Cassia angustifolia* as well established market has stimulated their cultivation. Last decade saw extensive farming by small farmers with support from National Medicinal Plants Board (NMPB). A number of medicinal species were tried with mixed results. *Aloe vera*, *Acorus calamus*, *Asparagus racemosus*, *Ocimum*

*sanctum*, etc. were successful. Farmers reported lack of markets in central and eastern parts of the state for cultivated species. Since 80 percent of ISM industries are skewed to western part of the state, cultivation is more viable there due to locational and market factors. The demand for cultivated species is increasing and wild sources of medicinal plants are being replaced. If markets are linked properly, the farmers, traders, herbal industries, processing units and exporters will benefit. Agroforestry systems will ensure regular supply of raw drugs. The paper highlights some interesting findings for development of the sector.

966. **Bhatt, K.C. & Saha, D. 2014.** "Indigenous knowledge on fibre extraction of Sunnhemp in Bundelkhand region, India". *Indian J. Nat. Prod. & Resources* 5(1): 92–96. Abstract: Indigenous knowledge plays a vital role in assessing the trend of evolution of human civilization; hence documentation of local uses of plants and traditional practices developed through use of human intellect now has become an important activity due to implementation of various issues related to Convention on Biological Diversity (CBD), Intellectual Property Rights (IPR), etc. Keeping this in view, an attempt has been made to document indigenous knowledge on fibre extraction of sunnhemp still practiced in some pockets among the tribal communities of Bundelkhand region, reflecting to preserve the age old tradition of farming communities residing there.
967. **Bhattacharya, A.K. & Dubey, R.W. 2004.** "A study on utilization of medicinal plants by local communities of Satpura-Maikal region of Madhya Pradesh, India". *J. Non-Timber Forest Prod.* 11(2): 116–119. Abstract: The paper attempts to examine the importance and utilization pattern of the major medicinal plants among the local communities of Satpura-Maikal range of Madhya Pradesh.
968. **Bhattacharya, A.K. & Patra, K. 2004.** "Impact on consumption of Non-Wood Forest Products (NWFP) on the nutriture of Pahadi Korwa primitive tribal group— A study from Sarguja district of Chhattisgarh". *J. Non-Timber Forest Prod.* 11(4): 254–261. Abstract: The paper deals with the relationship between the Primitive Tribal Group (PTG) and the Non-Wood Forest Products (NWFP) used for their nutritional fulfilment in the forest of central India, with special reference to the Pahadi Korwa PTG of Sarguja district of Chhattisgarh. The study area, methodology and the village demographics have been discussed. The consumption pattern of NWFP has been examined. Thirty eight major NWFP species are consumed by the villagers of the study area. Nutritional assessment of the NWFP indicates that 77% people (49% male and 51% female) have been found to be underweight. The chemical analysis of the species reveals that the values of the nutrient contents of species vary significantly as compared to those prescribed by the ICMR (taken as standard). The species that have high nutritional value and also consumed in sufficient quantities include Achar (*Buchanania lanzen*), Dumar (*Ficus glomerata*), Mahua (*Madhuca latifolia*) and pihari (*Psalliota campestris*). Based on the

results and the analysis, recommendations for better utilization of NWFP have been made. There should be adequate emphasis on the traditional management and conservation methods of NWFP along with proper concern at national, state and local levels.

969. **Bhattacharya, A.K., Sekhar, K. & Kumar, Y. 2003.** "Marketing of certain cultivated medicinal and aromatic plants with special reference to Madhya Pradesh, India". *J. Non-Timber Forest Prod.* 10(3/4): 163–171. Abstract: The article embodies the findings of the field study undertaken to explore the feasibility of cultivation and marketing of the important medicinal and aromatic plants (MAPs) of Madhya Pradesh as an alternative source of livelihood for the local communities. The paper examines in detail the various issues and factors influencing the marketing of eight important cultivated medicinal and aromatic plants in the study area. The paper also examines the existing marketing and distribution channels of these MAPs, analyses the pricing pattern and based on the conclusions drawn suggests marketing strategy.
970. **Bhattacharya, A.K., Tiwari, P., Patra, K. & Sinha, V.K. 2004.** "Seasonal availability and consumption pattern of non-wood forest products (NWFP) as food among Baiga tribe of Dindori district of Madhya Pradesh, India". *Ethnobotany* 16(1&2): 64–68. Abstract: Non-wood Forest Product (NWFP) constitutes an integral component of the food for the communities dependent on forests. Their role becomes more significant for less agricultural dependent communities with small land holdings residing in remote forests. In order to access the role of NWFP-based food habits of such communities, a preliminary study was carried out in one of the most forest dependent tribes of India, i.e. Baigas, living in remote 'Chadha' village of Dindori district of Madhya Pradesh.
971. **Bhowmick, P.K. & Chowdhary, B. 1966.** "Some aspects of the magico-religious beliefs and practices of the Mundas". *Folklore* 7: 100–107.
972. **Bisen, S.S. & Kunhikannan, C. 2006.** "Extension of medicinal plant cultivation in farmlands in central India". *J. Non-Timber Forest Prod.* 13(3): 183–187. Abstract: Medicinal Plant cultivation has been popularised in farmlands in different parts of central India through the efforts of Tropical Forest research Institute, Jabalpur, Madhya Pradesh. Economic analysis of medicinal plant cultivation packages/models showed that they were viable for increasing the financial conditions of farmers in long run. Several farmers have taken up large scale cultivation of medicinal plants like Isabgol (*Plantago ovate*), Bach (*Acorus calamus*), Safed Musli (*Chlorophytum borivillianum*) and Muskhadana (*Abelmoschus moschatus*) based on the technical know-how provided by the institute. Now these farmlands serve as the source of planting materials for further extension of such activities.
973. **Bondya, S.L., Khanna, K.K. & Singh, K.P. 2006.** "Ethnomedicinal uses of leafy vegetables from the tribal folk-lore of Achanakmar-Amarkantak Biosphere Reserve (Madhya Pradesh

- & Chhattisgarh)". *Ethnobotany* 18: 145–148. Abstract: An account is given of ethnomedicinal uses of 21 plant species from 16 families recorded from Baiga, Gond and Oraon tribes of Achanakmar-Amarkantak Biosphere Reserve. Data on local name, dosage, mode of administration, locality, name of the tribe (informant) and voucher specimen number are given. Analysis indicates that eight species are referred for stomach, four for skin and two for liver diseases, cough and cold, toothache and urinary disorders. For a number of ailments like spermatorrhoea, gonorrhoea, insanity, heart diseases, pneumonia, wound, leprosy and insomnia, the same species also find use as galactagogues, blood purifiers, anthelmintics and aphrodisiac, only one plant species is referred to be effective. Some uses are reported for the first time.
974. **Bondya, S.L., Singh, K.P. & Khanna, K.K. 2009.** "Exploitation of ethno-medicinal plants and their marketing status in Achanakmar-Amarkantak Biosphere Reserve". *J. Trop. Forest.* 25(1&2): 33–37. Abstract: Achanakmar-Amarkantak Biosphere Reserve in central India is endowed with rich floristic diversity with numerous ethno-medicinal plants of economic significance. These plants used in traditional indigenous system of treatment for various ailments by the tribal and non-tribal residents of the area, form the backbone of medicines prescribed by local practitioners like Kabirajs, Pahans Vaidrajs, etc. The local ethnic communities like Gond, Baiga, Kork, Muria and Oran, in order to earn good revenue for their livelihood, collect these ethno-medicinal plants in huge quantities and sell them in the local markets at cheaper rates to vendors, thereby threatening the diversity of these ethno-medicinal plants in nature and pushing many species to fall in red data categories in near future. While carrying out field and market survey of these plants, it has been recorded that the vendors sell these plants to the users/herbal practitioners at much higher rates after purchasing them directly from local collectors.
975. **Bramhe, B.K. & Shivwanshi, L.R. 2015.** "Study of some poisonous plants of Balaghat district of Madhya Pradesh, India". *Int. J. Pharmacol. Biol. Sci.* 9(1): 101–104.
976. **Brij, Lal. 1993.** "Ethnobotany of Baigas of Madhya Pradesh— A preliminary report". *Arunachal Forest News* 11(1): 17–20.
977. **Brij, Lal. 1988.** "Traditional remedies for bone fracture among the tribals of Madhya Pradesh, India". *Aryavaidyan* 1(3): 190–195.
978. **Brij, Lal & Dubey, U.P. 1992.** "A survey of the plant ethnomedicine of Amarkantak plateau in Central India". *Agric. Biol. Res.* 8(1): 29–37.
979. **Brij, Lal & Upreti, D.K. 1995.** "Ethnobotanical notes on three Indian Lichens". *Lichenologist* 21(1): 77–79.
980. **Chaghtai, S.A., Garg, A. & Ahmad, J. 1978.** "Studies on the occurrence of Medicinal plants of Euphorbiaceae from Bhopal and its neighbourhood". *Bull. Med.-Ethno-Bot. Res.* 3(1): 57–64.

981. **Chakma, T., Meshram, P., Kavishwar, A., Rao, P.V. & Babu, Rakesh. 2014.** Nutritional status of Baiga tribe of Baihar district, Balaghat, Madhya Pradesh". *J. Nutr. Food Sci.* 4(3): 275.
982. **Chatterjee, A.K.** "Study of ethno-medicinal plants among the tribals of Surguja region (C.G.)". *Int. J. Advanced Comput. Theory & Engineer.* 3(2): 56–60. Abstract: India is one of the world's 12 mega biodiversity centers having rich vegetation with 47000 plant species and a wide variety of medicinal plants along with tradition of plant based knowledge distributed among the vast numbers of ethnic groups. Chhattisgarh is the only state of the country where about 44.2% (59772.2 Heq) of the total area of state occupied by the forest (Tripathi at 2006). Forest division of northern hilly zone of Chhattisgarh was surveyed to study the distribution pattern and ethno-botanical use of medicinal plants. In this state the percentage of sal and mixed forest is more than the teak forest. Chhattisgarh state is divided geographically in to three regions, namely Northern hills, Chhattisgarh plain and Bastar plateau. The significant Tribes of the state are: Gond, Korwa, Oraon, Munda, Baiga, Nagesia, Agarias etc. The life style of tribal people Depends upon the land. Agriculture, hunting, fishing, collection of forest products, bamboo work or labour of any kind is their livelihood. The paper reports the results of an ethno medicinal study conducted in Chhattisgarh. The study has been carried out in Odgi and Dipadih forest of surguja district. Medicinal uses of plant species are described in which different parts of plants are used in different diseases.
983. **Chattopadhyaya, K.P. 1954.** "A short note on cultivation among tribal folk in India". *Vanyajati* 2(4): 110–112.
984. **Chaturvedi, Y. & Saxena, M. 2014.** "Ethnomedicinal study of plants with special reference to bacterial diseases in Kondar and Saur tribes of district Chhatarpur, Madhya Pradesh, India". *World J. Pharm. Pharmaceut. Sci.* 3(7): 1899–1904. Abstract: Madhya Pradesh is central state of India and Chhatarpur is a district of Madhya Pradesh. It is situated at northern part of state. It is spread over an area of 8687 square kilometers. Saur and kondar are the main tribes of Chhatarpur district. According to the list of scheduled tribes in the gazette of India, kondar is mentioned at number 22 and Saur is mentioned at number 44. Both the tribes have been suffering from bacterial diseases for a long. For the treatment of such bacterial diseases several plants species are being used by the tribes. Cholera, tuberculosis, leprosy, pneumonia, typhoid, botulism, dysentery, diarrhoea, gastroenteritis, bronchitis, tonsillitis are the common bacterial diseases found among the tribes. This paper highlights 45 ethnomedicinal plants, traditionally utilized by the Saur and kondar tribes of Chhatarpur district to cure bacterial infections.
985. **Chaudhuri, Rai, H.N., Banerjee, D.K. & Guha, A. 1977.** "Ranu"— A tribal tablet". *Vanyajati* 25: 9–13.



986. **Chavan, S.B., Keerthika, A., Uthappa, A.R., Sridhar, K.B., Newaj, R, Handa, A.K. & Saroj, N. 2017.** "Traditional knowledge of broom making from Date palm (*Phoenix sylvestris* Roxb.) for sustainable livelihood in Madhya Pradesh, India". *Indian Forester* 143(12): 1321–1324.
987. **Choubey, V., Dubey, N. & Dubey, P. 2015.** "Report of some medicinal plants used in folk medicine in tribal areas of M.P.". *Indian J. Life Sci.* 5(1): 21–23. Abstract: About 150 locally available plants used in folk medicine by the natives of M.P. have been listed below. The local name and botanical names and medicinal uses of each plant are given wherever available. The different plants as well as method of use and their distribution in Indian subcontinent are reported.
988. **Choubey, V.B. 2006.** *Study of some poisonous plants of Sagar and its environ with special reference to phytochemical analysis.* Ph.D. Thesis. Dr. H.S. Gour University, Sagar (M.P.) (Unpublished).
989. **Choubey, V.B. & Khare, P.K. 2007.** "A preliminary survey of poisonous plants in Sagar district of central India". *Indian Forester* 133(12): 1715–1721. Abstract: Fifty plant species have been found which have been reported to possess toxic properties from Sagar district of Madhya Pradesh. These include trees, herbs and shrubs belonging to 31 different families and 46 genera of 26 herbs, 9 shrubs and 15 trees.
990. **Choubey, V.B. & Khare, P.K. 2013.** "Use of poisonous plants in traditional antidotes of snake poison in Sagar region of central India". *Indian Forester* 139(9): 836–838. Abstract: The rural population use poisonous plants as an antidote of snake poison since long time. A preliminary survey was conducted for poisonous plants used in snake bite problem in tropical dry deciduous forests of Sagar region and its environs in central India. The paper includes a list of wild and cultivated poisonous plants common to this region which are hitherto not systematically reported. A total number of 15 species belonging to 13 families and 12 genera were collected. Out of these, eight herbs, one shrub and six tree species were classified. These plants are used traditionally as an indigenous medicine in snake bite problem, but these plants are harmful for humans and livestock. Plant habit, chemical constituents, toxic part and use of snake antidotes have been described and discussed.
991. **Choubey, V.B. & Khare, P.K. 2014.** "Some poisonous medicinal plants used for abortion in Sagar region of central India". *Indian Forester* 140(3): 309–311. Abstract: A preliminary survey was conducted for poisonous and indigenous medicinal plants in tropical dry deciduous forests of Sagar region in central India. A total of 14 plant species belonging to 13 families and 13 genera were collected. Among them four were herbs, two shrubs and eight were tree species. These plant species are used traditionally as indigenous medicines in many diseases, Name of the species, its family, habit, toxic

principles, chemical constituents of toxic part and medicinal uses are described.

992. **Choudhary, M.S., Mishra, N., Upadhyay, S.T. & Upadhyay, R. 2011.** "Indigenous knowledge of using medicinal plants in treating skin diseases by tribals in central Narmada valley of Madhya Pradesh (India)". *Bull. Environm. Pharmacol. & Life Sci.* 1(1): 60–63. Abstract: The present study mainly focuses on the study of Indigenous Herbal Remedies used to cure of skin by Tribal's from Central Narmada Valley of Madhya Pradesh. The present study is based upon the ethnobotanical studies on four tribal communities of Bhil, Bhilala, Gond and korku. Tribal healers utilize several local available plants in ethno-medicinal practices. Present paper reports the use of 29 species of plants variously used by the tribal communities incurring skin diseases.
993. **Chouhan, D.S. & Ray, Sudip. 2017.** "Certain medicinal plants used in recovery bone fracture and dislocation of joints in Alirajpur district, Madhya Pradesh". *Int. J. Bot. Stud.* 2(5): 113–114. Abstract: Alirajpur district is situated in the extreme western corner of Madhya Pradesh. It is known one of the tribal district of M. P. where 87% belong to tribal community. Ethnobotanical surveys were made in 20 villages during 2010 to 2016. Present 13 ethnomedicinal plants are recorded in present study which are used locally by tribals in bone injury, fracture, ligament pain etc. Mentioning few of important plants of this category are *Aloe vera*, *Acacia leucifolia*, *Butea monosperma*, *Bombus* sp., *Calotropis procera*, *Cissampelos quadrangularis*, *Cordia myxa*, *Ficus glomerata*, *Ficus bengalensis*, *Madhuca indica*, *Ipomoea fistulosa*, *Sarcostemma acidum* and *Ricinus communis*.
994. **Dadwal, V.S. & Singh, N. 2013.** "Occurrence and Management of diseases in medicinal plants of Madhya Pradesh and Chhattisgarh". *J. Trop. Forest.* 29(1&2): 42–53. Abstract: Medicinal plants are the local heritage with global importance, world is endowed with a rich wealth of medicinal plants. In the present investigation important diseases of some medicinal plants of Madhya Pradesh and Chhattisgarh were recorded. In order to study the diseases, extensive survey of forest nurseries fields were undertaken to observe the incidence of diseases. The diseases of some important medicinal plant such as leaf spot, top dying, inflorescence disease and die back were studied in detail. Leaf spot disease of *Rauvolfiaserpentina* caused by *Macrophominaphaseolina*, *Phomopsissethii*, *Mycosphaerellarauvolfiae*, *Phomajolyana*, *Alternariaalternata*, *A.tenuissima*, *Cercosporarauvolfiae*, *Colletotrichumdematium* and *Lasiodiplodiatheobromae*, *Azadirachtaindica* caused by *Pseudocercosporaranjita*, *Adhatodavasica* caused by *Cercospora* sp., *Santalum album* caused by *Curvularialunata*, *Catharanthusroseus* caused by *Cladosporiumgallicola*, *Andrographispaniculata* caused by *Alternariatenuissima*, *Lanneacoromandelica* caused by *Alternariadianthicola*, *Operculina turpethum* caused by *Cladosporiumoxysporum*, *Pongamiapinnata* caused by *Fusicladiumpongamae*, *Alpinagalanga* caused by *Drechslerabiseptata*, *Argyrea speciosa* caused by *Alternaria* sp. Powdery mildew disease of *Abelmoschusmoschataus* caused by *Oidium* sp. Damping-

off, leaf spot and root rot disease of *Withaniasomnifera* caused by *Sclerotiumrolfsii*, *Pseudocercosporawithanae*, *Cladosporiumcladosporioides*, *Fusariumoxysporium* and *Meloidogyneincognita*. The symptoms and factors affecting the disease were studied. Suitable culture practices particularly proper drainage in cultivated field was recommended for minimizing the infection. Some other practices like use of biopesticide, bavistin 0.05%+Streptomyces sp.10<sup>6</sup>spores/ml and application of neem cake were also recommended to control diseases in the field.

995. **Dahare, D.K. & Jain, A. 2010.** "Ethnobotanical studies of plant resources of Tahsil Multai, district Betul, Madhya Pradesh, India". *Ethnobot. Leaflet*. 14: 694–705. Abstract: The present investigation was carried out in Tahsil Multai, a region dominated by the Korku and Gond tribes. A large number of traditional herbal healers exist belonging to the tribal community and are utilizing local plants in ethno-medicinal practices prevalent in the area and resulted in the documentation of 47 medicinal plant species belonging to 29 families and 45 genera. The study thus underlines the potentials of the ethnobotanical research and the need for the documentation of traditional ecological knowledge pertaining to the medicinal plant utilization for the greater benefit of mankind in different regions.
996. **Das, Prabhat K., Badore, Narendra S., Patel, Pankaj & Deshmukh, Nitin. 2016.** "Ethnomedicinal wound healing plant in Khargone district of Madhya Pradesh: A survey over *Nemari* communities". *Pharmaceut. & Biol. Evaluations* 3(4): 388–399. Abstract: The present ethnobotanical study represents the wound healing treatments of various fresh plants which are found and used traditionally by the 'Nimari' people of Khargone district in Madhya Pradesh state, India that lies between 22° 11' 0" North, 75° 35' 0" East. A total of 34 plants belonging to 24 families have been documented for their therapeutic use against wounds and related injuries such as cuts, burns and boils. Among all the plant parts, leaves were the most frequently utilized part of plant and most herbal remedies are prepared as paste or extract or juice and applied externally and were found to possess good healing property over a short period of time. All the plants have been reported for wound healing activity but none of them having scientific evidence that which compound is responsible for the activity. The present study concluded that further clinical and phytochemical experimentation is needed.
997. **Datt, B. 1996.** "Ethnobotanical resources of Chhatarpur district (Madhya Pradesh). In: Jain, S.K. (Ed.), *Ethnobiology in Human Welfare*. Deep Publication, New Delhi.Pp. 400–402.
998. **De, Kantishree & Patel, A.R. 2011.** "Determination of lead and mercury in two herbs of medicinal value from Maihar (M.P.)". *Indian J. Appl. Pure Biol.* 26(2): 251–253. Abstract: Heavy metals like Hg and Pb were analysed in two medicinal plants viz. *Azadirachta indica* and *Ocimum sanctum* belonging to the family Meliaceae and Labiatae respectively,

and their soils from two different places of Maihar. Results showed accumulation of Hg and Pb confirming the polluted nature of the source.

999. **Deshmukh, O.S. & Pochhi, V.U. 2017.** "Plants used in ethno-veterinary medicines by tribal peoples in Betul district, Madhya Pradesh, India". *Int. J. Appl. Res.*3(3S):34–39. Abstract: The paper highlights some commonly used ethnoveterinary medicines for domestic animals to treat ailment. The data was gathered from ethnic people specially Gond and Korku in the tribal pockets of Betul district. A total 24 species belonging to 24 genera, representing to 14 families as employed for 24 types of animal diseases. The species, family and vernacular name, plant part (s), drug preparation, mode of administration are studied.
1000. **Devi, Sangeeta, Kumar, Davinder & Kumar, Muneesh. 2016.** "Ethnobotanical values of antidiabetic plants of M.P. region, India". *J. Med. Pl. Stud.* 4(3): 26–28. Abstract: Diabetes mellitus is the leading cause of death after heart disease & cancer in many developed countries. The complications of diabetes affect the eye, kidney, and nervous system. Diabetes is a major cause of blindness, renal failure, amputation, heart attacks and stroke. Diabetes mellitus is a clinical condition characterized by increased blood glucose level (hyperglycemia) due to insufficient or inefficient insulin. An important feature of diabetes is that the body cells are starved of glucose despite its very high concentration around i.e., scarcity in plenty. Plants have been used both in the prevention and cure of various diseases of humans and their pets. With the advent of human civilization, many systems of therapy have been developed primarily based on plants. Ayurveda, Homeopathy, Sidda, Unani etc. are our traditional systems of medicines. Many wild plants have also been used for medicinal purposes and some of them considered to be poisonous.
1001. **Dewangan, K., Acharya, V., Naik, M.L., Sinha, S. & Girokar, A.K. 2011.** "Home medicines of Chhattisgarh". *Indian J. Appl. Pure Biol.* 26(1): 47–52. Abstract: Chhattisgarh state is famous for its natural resources, tribes and rich biodiversity since ancient time. Ancient name of Chhattisgarh "Dakshin Kosal" has originated from a grass known as Kush – *Desmostachya bipinnata* (L.) Stapf. which is used in religious ceremonies. Physiography, soil and climate of the state favour luxurious growth of vegetation. A large size of the population resides in forests and villages and a good proportion of their livelihood is fulfilled through the forests. Plants and their names, play important role in their life particularly in dilects, socio-religious ceremonies, traditional and domestic system of medicine, folklore and folktales. Many of the plants are used in the form of home medicine. Knowledge of such medicines are orally transferred by the old family members, particularly the ladies, from one generation to another.
1002. **Dewangan, P.& Acharya, V. 2017.** "Ethnomedicinal importance of some plants of family Leguminosae". *Indian J. Appl. Pure Biol.* 32(2): 155–161. Abstract:The present study

focuses on ethno medicinally important plants of family Leguminosae in Raipur district. Ethnomedicine basically deals with the traditional use of plants by aboriginal people to cure different ailments. The plant family Leguminosae is one of the largest family of flowering plants. Its use traditionally is very diverse in various ways as food, medicine, Timber, Non-Wood Forest Produces(NWFPS) etc. The work emphasizes on medicinal importance of some plants of this family which has been used traditionally. The study area is Raipur district in the state of Chhattisgarh situated in the central part of India. Information is gathered from various ethnic groups of the area, also literature is taken into consideration for the purpose. Plants like *Hardwickia binnata* (Anjan), *Trigonella foenum-graecum* (Methi), *Cyamopsis tetragonoloba* (Gawarphalli), *Sesbania grandiflora* (August), *Cajanus cajan* (Arhar), *Dolichos biflorus* (Kulthi), *Psoralea corylifolia* (Babchi), *Butea monosperma* (Palash) are used in various traditional medicine. *Cajanus cajan* is vastly cultivated as a pulse crop but it is also used in colic, convulsions and leprosy. *Butea monosperma* is used in various skin diseases, in ulcer, piles, and haemorrhages. *Psoralea corylifolia* is used in skin fungal infections. Likewise *Dolichos biflorus* is used in preparations made for post natal care. The information from this study would aware people about medicinal properties and usage of these plants. Also conservation practices would be encouraged due to its importance.

1003. **Dikshit, S.S. & Kala, C.P. 2014.** "Traditional utilization and harvesting of medicinal plants in Madla district of Madhya Pradesh". *Appl. Ecol. & Environm. Sci.* 2(2): 48–53. Abstract: Utilization and harvesting practices of medicinal plants used by local people of Ghughri block in Mandla district of Madhya Pradesh was studied through questionnaire survey. The study resulted in the documentation of 43 medicinal plants of these 95% was used by traditional healers for curing various diseases. Tree species were used in maximum cases, followed by herbs and shrubs. Tree bark was the most used plant part for medicinal purpose, followed by root. In all studied villages, the quantities of medicinal plants collection for own consumption was higher than the quantity collected for sale. Species like *Embilica officinalis*, *Terminalia bellirica*, *Aegle marmelos*, *Semecarpus anacardium*, *Buchanania lanzan*, *Terminalia chebula*, and *Syzygium cumini* were mainly used by local people for own consumption and not for sale. There was almost consistency in collection of medicinal plants across the studied villages however the collection was determined by the season of species availability. Some species being rare and found in limited area was either not collected or collected by a few villagers. The findings of the study are further discussed in the sustainability perspective of medicinal plants and traditional healing systems.
1004. **Dixit, A.K. 1994.** *Ethnomedicinal, phytochemical and antimicrobial studies of some medicinal plants of Sagar district.* Ph.D. Thesis. Dr. H.S. Gour University, Sagar, Madhya Pradesh, (Unpublished).

1005. **Dubey, B.K. & Bahadur, F. 1966.** *A study of the Tribal People and Tribal Areas of Madhya Pradesh.* Tribal Research & Development Institute, Bhopal.
1006. **Dubey, G. 2004.** "The ethnobotany of the Gond tribe of Noradehi Wildlife Sanctuary, Madhya Pradesh – Plants used in skin diseases". *Bull. Bot. Surv. India* 46(1-4): 403–410. Abstract: About 46 plant species used by Gond tribesmen in Noradehi Wildlife Sanctuary of Madhya Pradesh for curing various skin diseases are enumerated.
1007. **Dubey, G., Sahu, P. & Sahu, T.R. 2000.** "Role of plants in different region ceremonies common to Bundelkhand region of Madhya Pradesh". *J. Med. Arom. Pl. Sci.* 22/4A & 33/1A: 542–545.
1008. **Dubey, N. 2002.** *Ecological and ethnobotanical studies on some medicinal plants of Central India.* Ph.D. Thesis. Dr. H.S. Gour University, Sagar, Madhya Pradesh (Unpublished).
1009. **Dubey, P.C., Sikarwar, R.L.S., Khanna, K.K. & Tiwari, A.P. 2009.** "Ethnobotany of *Dillenia pentagyna* Roxb. in Vindhyan region of Madhya Pradesh, India". *Nat. Prod. Radiance* 8: 546–548. Abstract: An ethnobotanical study among the various tribal and folk communities of Vindhya region of Madhya Pradesh was carried out during the year 2004-2007. Detailed first hand information on ethnobotanical uses of *Dillenia pentagyna* Roxb., an endangered tree species, was collected, which accounts for many ethnical uses in the study area. The tribal and folk communities use the various parts of it for the treatment of their different ailments and diseases, viz. delivery (bark), bone fracture (leaf), body pain (root), piles (leaf), diabetes (bark), diarrhoea and dysentery (bark), etc.
1010. **Dubey, S. 2018.** "Ethnomedicinal studies on weeds of wheat crop field of Satna district of Madhya Pradesh". *Int. J. Pharm. Life Sci.* 9(1): 5690–5694. Abstract: A weed is a plant growing where it is not desired. JethroTull, a great Britain farmer, was the first person to use this definition of weed in his famous writing "The new Horse Hoeing Husbandry" published as a first book on agriculture in 1731 since then several definitions of weeds have been suggested around this basic information, "A weeds is plant growing out of place and time". The present paper enumerates the weed of wheat crop field of Satnadistrict of Madhya Pradesh.
1011. **Dubey, V. 2005.** "Herbal folk medicines of Gond tribe of Bilaspur district: An ethnobotanical study". *J. Bot. Soc. Univ. Sagar* 40: 87–92. Abstract: The state Chhattisgarh is rich in its natural resources including vegetation. The state is inhabited by many tribes, the Gond being the largest. These people have their own beliefs, social taboos, and their traditional way of using the plants as natural medicine. The present paper deals with some of the plants which are less known to common people and used by the Gond tribe as folk medicine. There is a great need to preserve this pool of indigenous knowledge and to search the traditional ways of conserving this biodiversity.

1012. **Duggal, R.R., Masih, S.K., Mishra, R.P. 2017.** "Plant diversity in sacred groves of Jabalpur forest division (Madhya Pradesh)". *Indian J. Trop. Biodiv.* 25(1): 31–39. Abstract: Sacred Groves are the one form of nature worship which is considered as "Sacred Natural Sites". These nature worship localities are places providing protection to biodiversity of forest dedicated to deities and ancestral spirits of tribal and forest dwellers. The present study has been carried out from 2013-2016 in 7 forest ranges of Jabalpur forest division to assess the plant diversity in existing sacred groves. As a result total 336 plant species representing 265 genera and 107 families are recorded from 105 sacred groves. Out of which 107 are trees, 60 shrubs, 98 herbs, 26 climbers, 25 grasses, 4 parasites, 2 epiphyte, 5 bryophytes and 10 are aquatic plants. During the study 28 RET species has also been recorded from these sacred groves.
1013. **Duggal, R.R., Masih, S.K., Mishra, R.P. 2017.** "Medicinally valuable plants from sacred groves of Jabalpur forest division (Madhya Pradesh)". *Life Sci. Bull.* 14(1): 21–25. Abstract: Sacred groves are protected forest patches dedicated to local gods and goddess by the tribal, forest dwellers and conservation their ethics values with taboos with their tradition. The small forest patches play an important role in conservation and protection of their in and adjoining biodiversity. The survey work carried out in existing sacred groves of Jabalpur forest division and an inventory has been made with reference to plant species having medicinal importance. The 164 plant species representing 71 families are recorded with their uses for treatment of various common ailments like skin diseases, ulcer, cough, cold, rheumatism, bronchitis and fever, etc.
1014. **Dulkar, C. 2008.** *Studies on ethnobotanical and biochemical aspects of some medicinally important plants of Khargone district of Madhya Pradesh.* Ph.D. Thesis, Deptt. of Botany, Govt. Post-Graduate College, Khargone. (Unpublished).
1015. **Dwivedi, A., Chaturvedi, M., Gupta, A. & Argal, A. 2010.** "Medicinal utility of *Calotropis procera* (Ait.) R. Br. as used by natives of villae Sanwer of Indore district, Madhya Pradesh". *Int. J. Pharm. Life Sci.* 1(3): 188–190. Abstract: *Calotropis procera* (Ait.) R. Br., a wild growing plant of family Asclepiadaceae, is well known for its medicinal properties. The present paper enumerates the medicinal uses of part of *Calotropis procera* for the treatment of various human ailments by the natives of village Sanwer of Indore district of Madhya Pradesh.
1016. **Dwivedi, A., Patel, R., Jhade, D., Sachan, R. & Argal, A. 2009.** "Traditional phytotherapy used in the treatment of malaria by rural people of Bhopal, district of Madhya Pradesh, India". *Ethnobot. Leaflet.* 13: 475–479. Abstract: Malaria is caused by Plasmodium and transmitted through female Anopheles mosquito. The disease is common in rural areas. Although a number of synthetic medicines have been used for the treatment of malaria, but they have adverse effects and their high cost is beyond the reach of

common people. It is, therefore, worthwhile to look towards antimalarial herbal drugs. Herbal drugs are cheaper, easily available and with no fear of any side effects. The present paper enumerates the herbs used in malaria by the rural people of Bhopal district of Madhya Pradesh, India.

1017. **Dwivedi, N., Tripathi, M. & Tripathi, I.P. 2012.** "Documentation of traditional medicinal knowledge at Chitrakoot region, district Satna (M.P.) with special reference to janamghutti". *Life Sci. Bull.* 9(1): 139–141. Abstract: Health care based on traditional medicine is still primarily an art, though it needs a solid foundation of science to rest on. Traditional medicines may have been used for centuries by communities and found to be efficacious through long experience. In ancient days such uses came into vogue due to accidental experimentation or observation which subsequently gave rise to practice by laymen called Nostrum or folk-lore. Since Chitrakoot is a treasure of folklore claims and besides qualified practitioner certain laymen especially in rural area and tribal area possess a great knowledge on certain typical uses of several plants. Recognition of the native care and time tested ethnomedical practices are therefore highly relevant in childcare even in modern times. In the present study an attempt has been made to record the information on Janamghutti, a common formulation used by several household as preventive health care from five villages of Chitrakoot region. 23 plant species were found to be used as a medicament in single or in combination against common ailments of the children.
1018. **Dwevedi, R.K. 2017.** "Traditional herbal medicine for respiratory disorders among the tribals of Singrauli district in Madhya Pradesh". *Int. J. Pharm. Life Sci.* 8(12): 5657–5658. Abstract: Herbs are staging a comeback and herbal renaissance is happening all over the globe. The herbal products have been symbolizing safety in contrast to the synthetics that are regarded as unsafe to human and environment. Although herbs have been prized for their medicinal, flavouring and aromatic qualities for centuries, the synthetic products of the modern age surpassed their importance, due to serious side effects. However, the blind dependence on synthetics is over and people are returning to the naturals with hope of safety and security. The present paper deals with the traditional herbal medicine for respiratory disorders among the tribals of Singrauli district in Madhya Pradesh, India.
1019. **Dwevedi, R.K. 2017.** "Traditional knowledge among the natives of Singrauli district in Madhya Pradesh". *Int. J. Pharm. Life Sci.* 8(12): 5659–5663. Abstract: Singrauli district of Madhya Pradesh is well known for highest density of bioresources and gives very precious natural habitat for flora and fauna. The natives are residing in and out side of the forests mostly utilize a number of plants for their basic requirements. Some of the significant contribution obtained by the natives of the study area is mentioned in the present paper. The present paper enumerates the traditional knowledge among the



natives of Singrauli district in Madhya Pradesh, India.

1020. **Dwivedi, R.K. 2018.** "Studies on traditional herbal economic product used by tribal of Singrauli district of Madhya Pradesh". *Int. J. Bot. Stud.* 3(1): 5–7. Abstract: In the present paper 16 Commerce and cottage industry based plants species consumed by the tribals. All 16 plant species are enumerated with their botanical names, common names, family, parts used and economic product in the study area. Toothache is often alleviated by placing a small piece of onion (*Allium cepa*) on the affected tooth or gum. Likewise, chewing raw onion for 10 minutes is sufficient to kill the germs. Leaves paste of akarkara mixed with equal amount of root paste of madar and filled in cavity. It is an excellent herbal carries filler. The tribal and rural people can achieved the economic prosperity and better standard of life by minor forest products. A number of economic products such as gum, basketry, cordage, perfume, broom, tannin, tea, fruits, seeds, oil, alcohol, plate, mat and bidi have been obtained, prepared and extracted by the native's of the study area. They sell these products in nearby village market and get the additional income. Moreover, they also utilized these products in their day-to-day needs. However, forest depletion has been rapid and the direct demand on forest has been mounting.
1021. **Dwivedi, S.2004.** *Herbal remedies among the tribal and non-tribal of Rewa district in Madhya Pradesh.* Ph.D. Thesis. A.P.S. University, Rewa.(Unpublished).
1022. **Deivedi, S. 2009.** "Status survey of medicinal plants wealth of Malwa regions of Madhya Pradesh with special reference to conservation of vulnerable and endangered species". *J. Econ. Taxon. Bot.* 33(2): 443–452. Abstract: WHO has estimated that at least 60–80% of the world population relies on traditional system of medicine for various ailments. Over 21000 plant species were found to be useful in the preparation of medicines. Due to the growing awareness about the side effects and complications of synthetic medicines, usage of herbal products has gained tremendous importance. Drugs obtained from plant origin occupy important positions in different pharmacopoeias. India is extremely rich in medicinal plants, which are being utilised at large extent by the Indian tribal population; in addition, many of the life saving drugs of the present allopathic system are obtained from plant sources only. Owing to immensity, it is often difficult to make a complete study of the medicinal plants found in a particular country. The present paper enumerates the medicinal plants of the Malwa regions of Madhya Pradesh, India with special reference to their conservation status, uses and conservation strategies.
1023. **Dwevedi, S. & Kohli, S. 2012.** "Folk-lore uses of *Guizotia abyssinica* (L.F.) Cass. among tribal and rural people of Madhya Pradesh". *Int. J. Pharm. Teachi. Practices* 3(4): 434–437.
1024. **Dwivedi, S., Dwivedi, A. & Dwivedi, S.N. 2008.** "Folklore uses of some plants by tribals of Madhya Pradesh with special reference to their conservation". *Ethnobot. Leafl.*

12: 763–771. Abstract: Madhya Pradesh sustains a very rich traditional medicinal plant wealth and inherits unique plant and animal communities. Due to deforestation, loss of biodiversity and indiscriminate exploitation of wild and natural resources, many valuable herbs like *Abrus precatorious*, *Bauhinia variegata*, *Mucuna prurita*, etc., are at the verge of extinction. The present paper enumerates status, conservation strategies and traditional uses of 80 plant species by the tribes of Madhya Pradesh. The claims were gathered by interviewing tribes of the study area. Attempts were made to verify the efficacy of claims with actual beneficiaries, although this was not possible in all cases due to social customs.

1025. **Dwivedi, S., Shrivastava, S. & Dubey, D. 2008.** “Traditional herbal remedies from the Vindhya region of Madhya Pradesh in the treatment of viral hepatitis”. *Int. J. Green Pharm.* 2(1): 17–21. Abstract: India is a repository of herbal medicines, and there are evidences of herbs being used in the treatment of diseases and for revitalizing various body systems in almost all ancient civilizations. Plants have traditionally served as man’s most important weapon against pathogens. Herbal medicines are widely used by all sections of the community, either as folk remedies or as medicaments in the indigenous as well as modern system of medicine. The present survey was conducted to record the medicinal herbs that tribes use

for the treatment of viral hepatitis. Data were collected by interviewing local traditional therapists and tribes of the region. A total of 14 medicinal plants were obtained. Information on local names, plant parts, chemical constituents and dosage used were also recorded and reported in this paper. The present study aims to draw the attention of researchers towards the need of future critical study.

1026. **Dwivedi, S., Shrivastava, S., Dubey, D. & Kapoor, S. 2009.** “Herbal remedies used in the treatment of scorpion sting and snake bite from the Malwa region of Madhya Pradesh, India”. *Ethnobot. Leaflet*. 13: 326–328. Abstract: Traditional medicine has a long history of serving people all over the world. Medicinal plants are an important element of indigenous medical systems in India as well as elsewhere. The ethnobotany and ubiquitous plants provide a rich resource for natural drug research and development. In recent years, the use of traditional medicine information on plant research has again received considerable interest. The circumstances under which the people lived- object poverty, disease and hunger combined with their curiosity towards their closed neighbour, the forest in which they lived and sought help in mitigating their woes and sorrows, must have been the essential factor in preserving their knowledge of herbs and usefulness to mankind. The present paper deals with the survey of 8 medicinal plant used in scorpion sting and snake bite by the aboriginal, tribal and non-tribal people of the Malwa region of India.

1027. **Dwivedi, S.N. 1999.** "Traditional health care among tribals of Rewa district of Madhya Pradesh with special reference to conservation of endangered and vulnerable species". *J. Econ. Taxon. Bot.* 23(2): 315–320. Abstract: Rewa district sustain a very rich traditional medicinal plant wealth and inherits unique plant and animal communities. Due to destruction of habitat, biotic interferences, loss of biodiversity and indiscriminate exploitation of natural resources many economically important species like *Abrus precatorius* L., *Amorphophallus campanulatus* (Roxb.) Blume, *Buchanania lanzan* Spreng., *Calonyction muricatum* G. Don, *Dioscorea oppositifolia* L. *Mucuna purita* L., *Momordica dioica* Roxb. ex Willd., *Strychnos nux-vomica* L., *Terminalia arjuna* Roxb. ex DC., *T. chebula* Retz. and *T. bellerica* (Gaertn.) Roxb. tend to become endangered and vulnerable and resulted in the great loss to our ethnobotanical wealth. The present paper enumerates 40 ethno-medicinal plants which need urgent conservation before they become extinct.
1028. **Dwivedi, S.N. 2003.** "Ethnobotanical studies and conservational strategies of wild and natural resources of Rewa district, Madhya Pradesh". *J. Econ. Taxon. Bot.* 27(1): 233–244. Abstract: During the course of present investigation, an extensive survey of 27 remote places scattered over 9 development blocks of Rewa district were conducted to enumerate the ethnobotanical importance of wild and natural plant resources. The study has revealed that the plant resources of this region are extremely rich and inhabitants solely depend on plants for their basic requirements since birth to death. Ethnobotanical survey and field work in the study areas throw light on their ethnic culture and tradition. The wild and natural plants are utilized as food, fodder, medicines and cultural, social and religious ceremonies. Due to destruction of habitat, biotic interference and indiscriminate exploitation of natural plants, many valuable species of this area are fast disappearing. Aborigines conserve these species by faith, myth, taboos and religious aspects. The present work has direct impact on many basic problems of tribals and rural peoples. The economic condition of these peoples would be upgraded by setting up a rural infrastructure of employment through cottage industries.
1029. **Dwivedi, S.N. 2004.** "Herbal remedies among the tribals of Sidhi district of Madhya Pradesh". *J. Econ. Taxon. Bot.* 28(3): 675–687. Abstract: Tribe man is a vanishing relic of early man in our country. He is confined at present to widely scattered and completely restricted pockets, chiefly in the hills and remote villages to which he has retreated under the increasing pressure of civilization. The study has revealed that the tribals still depend on herbal remedies for various human and cattle ailments. They have adequate knowledge of the curative properties of several medicinal herbs. These physicians have the treatment of traditional and well known diseases like asthma, bronchitis, eczema, blood pressure, diabetes, jaundice, gastrointestinal and gynaecological complaints. It has been observed that many valuable species are fast disappearing from the tribal belts, resulting a serious loss of ethnomedicinal wealth. Tribals conserve these herbs by traditional customs

and religious belief. The present paper throws a light on the basic problems of layman physicians. They can be associated with primary health care centres and also can be brought into the mainstreams of national health care programmes after essential training and education.

1030. **Dwivedi, S.N. 2008.** "Status survey of ethnobotanical resources of Satna district, Madhya Pradesh". *J. Econ. Taxon. Bot.* 32(Suppl.): 441–456. Abstract: The present investigation indicates that Satna district of Madhya Pradesh is rich in biodiversity and inhabitants mostly depend on herbal resources for their basic requirements. Ethnobotanical survey and fieldwork in the study area throw the light on their ethnic culture and tradition. The floristic diversity has been utilized as food, vegetable, medicine, fuel and dyes, and also used in several social, cultural and religious ceremonies. The biodiversity as well as the traditional knowledge is getting eroded rapidly due to ecological imbalance, indiscriminate exploitation and dearth of the knowledge holders. Besides, erosion also occurs due to the infiltration of the modern developments into the indigenous knowledge system. Inhabitants conserve the biodiversity and threatened species by faith, tradition and religious aspects. The present work throws the light on basic problems of tribal and rural people and also provides adequate infrastructure for the establishment of forest based minor cottage industries.
1031. **Dwivedi, S.N. & Pandey, Archana. 1992.** "Ethnobotanical studies on wild and indigenous species of Vindhya Plateau. I. Herbaceous flora". *J. Econ. Taxon. Bot., Addit. Ser.* 10: 143–150. Abstract: A survey of Vindhyan plateau was made to assess the food and medicinal value of herbaceous flora. It is observed that the tribals still preserve their unique tradition of using indigenous species for their day to day life. The paper enumerates about 60 plants used by tribals and backward peoples for their food and medicines. Many of these plants, viz., *Amorphophallus campanulatus*, *Anethum sowa*, *Basella alba*, *Calonyction muricatum*, *Carum copticum*, *Commelina benghalensis*, *Echinochloa frumentacea*, *Gynandropsis gynandra*, *Heliotropium indicum*, *Momordica* sp., *Ophioglossum* sp., *Orthosiphon pallidus*, *Paspalum scorbiculatum*, *Phyllanthus niruri*, *Polygala chinensis*, *Selaginella* sp., *Trigonella incise*, *Trichosanthes cucumarina*, *Vicia hirsuta*, *V. sativa*, *V. faba* and *Vernonia anthelmintica* are new for advanced classes of the society. Most of these contain valuable chemical substances that may be employed in Ayurvedic or Unani system of treatment. The paper therefore, communicates some new food and vegetable plants to the farmers and some medicinal plants hitherto unknown to the physicians. (*J. Indian Bot. Soc.* 69: 38–39).
1032. **Dwivedi, S.N. & Singh, H. 1984.** "Ethnobotany of kols of Rewa division, Madhya Pradesh". *Macro Level Environm. Planning Strategies & Policies* II: 37–44.
1033. **Dwivedi, S.N., Dwivedi, S. & Dwivedi, A. 2015.** "Herbal remedies for respiratory

- diseases among the natives of Madhya Pradesh, India". *Amer. J. Life Sci. Res.* 32: 158–162.
1034. **Dwivedi, S.N., Dwivedi, S. & Patel, P.C. 2005.** "Herbal remedies used by the rural people in the treatment of joint diseases". *Ethnobotany* 17(1&2): 193–196. (Silver Jubilee Volume). Abstract: Joint diseases occur due to raised serum uric acid level and deposition of urate crystals in cartilage of joints, resulting in recurrent attacks of pain and inflammation, including crippling effects in some cases. Modern medicines do not have any cure for these diseases, except their prevention and temporary relief. However, traditional herbal remedies do have a cure. A decoction, oral powder, herbal oil or hot formation prepared from some household herbs are excellent remedies for joint diseases.
1035. **Dwivedi, S.N., Dwivedi, S. & Patel, P.C. 2006.** "Medicinal plants used by the tribal and rural people of Satna district, Madhya Pradesh for the treatment of gastrointestinal diseases and disorders". *Nat. Prod. Radianc* 5(1): 60–63. Abstract: Gastrointestinal ailments are very common among the people of our country and tribals believe that it is a root cause for the occurrence of several other diseases. Modern synthetic medicine has so far not produced any effective curative drug. It only gives temporary relief. However, traditional herbal medicines have a better remedy for the diseases of digestive system. In the present paper herbal preparations used for gastrointestinal disorders by tribal and rural people of Satna district, Madhya Pradesh has been discussed. An effort is also made to correlate modern uses and activities with the plants used by tribals and rural people for the curative purpose of gastrointestinal disorders.
1036. **Dwivedi, S.N., Dwivedi, S. & Patel, P.C. 2007.** "Antimicrobial herbs used among the tribal and rural communities". *Ethnobotany* 19(1&2): 111–115. Abstract: Madhya Pradesh is known to harbour a rich wealth of biodiversity. Medicinal activity of a number of plants has already been reported but a good number of antimicrobial plants still used in traditional system of medicine are yet to be explored. A survey was carried out by the authors to collect the information on antimicrobial herbs of the state of Madhya Pradesh. The present article also focuses on folk uses of these plants to cure human disorders and diseases.
1037. **Dwivedi, S.N., Dwivedi, S., Dwivedi, A. & Goel, A.K. 2015.** "Ethnoveterinary medicine for some cattle diseases among the tribal and rural people of Madhya Pradesh". *Ethnobotany* 27: 86–91. Abstract: Ethnoveterinary research and development is holistic interdisciplinary study of indigenous knowledge and associated skills, practices, belief and social structure pertaining to the healthcare and husbandry of income producing animals. Present communication enumerates the herbal treatment of some dreadful cattle diseases preferred by the tribal and rural people of Madhya Pradesh. There is an urgent need to conserve this indigenous knowledge for future generation.

1038. **Ekka, Amia. 2011.** "A historical overview of ethnobotanical literature of Chhattisgarh (India): A graphic review and future directions". *Res. J. Sci. & Technol.* 3(4): 220–224. Abstract: This review of ethnobotany of Chhattisgarh state, literature covers approximately the period 1902-2005. During this period about 315 publications have appeared on ethnobotany of C.G. and closely bordering topics. Papers have been published in about 50 journals in India and abroad. Some 110 persons have been writing on ethnobotanical themes; most of these are plant taxonomists. Work has been published on over 16 ethnic groups. Only three or four ethnic groups have been the subject of more than five publications. Only two districts Bastar and Surguja have been well covered. Rest of the districts have been small work or no work done. Ethnomedicine for over 12 diseases, ailments and injuries figure in titles of papers. Based on this analysis, certain themes and areas are suggested for more intensive work.
1039. **Ekka, N.R. & Dixit, V.K. 2007.** "Ethno-pharmacognostical studies of medicinal plants of Jashpur district, Chhattisgarh". *Int. J. Green Pharm.* 1(1): 2–4. Abstract: Herbs are mines of useful drugs. Plants play a dynamic role in human life. Health care, which was a part of the traditional culture of the people, has become a profession in the modern industrial world. Synthetic drugs have given rise to side effects, which in some cases are more dangerous than the disease. Therefore world's attention has again turned to traditional medicinal system. This paper deals with the survey of medicinal plants of Jashpur district—a dense forest area. The native tribal for treating various ailments is already using these plants. The plants collected during the survey were enumerated alphabetically with correct botanical name, family, local name and uses.
1040. **Elwin, V. 1958.** *Leaves from the jungle, Life in a Gond village* (2<sup>nd</sup> Edn.). Oxford Univ. Press. London.
1041. **Gaur, S.K. & Lale, S.K. 2015.** "Medico-ethno-botanical survey of Satna Forest Division, Madhya Pradesh, India". *J. Drug Res. Ayurved. Sci.* 1(1): 75–101. Abstract: Satna Forest Division is one of the richest source of medicinal plants in Madhya Pradesh state. Present paper deals with the medico-ethno-botanical survey work of all the 10 forest ranges of Satna Forest Division. Present work enumerates 136 medicinal plants which are commonly used in Ayurvedic pharmacies/ drug industries and are also used by local inhabitants. The plants are arranged in alphabetical order of their botanical names followed by botanical description, parts used and their action etc.
1042. **Gaur, S.K. & Lale, S.K. 2016.** "Medicinal plant wealth of Rewa Forest Division of Madhya Pradesh state". *J. Drug Res. Ayurved. Sci.* 1(2-4): 47–72. Abstract: Rewa forest division is very rich source of medicinal plants in Madhya Pradesh State. In the present paper an account of medico-ethno-botanical study in all the forest ranges have been conducted to explore the medicinal plants wealth of Rewa forest division of Madhya Pradesh. The present work enumerates 149 medicinal plants which are commonly used in Ayurvedic

pharmacies/drug industries and are also used by local inhabitants. The plants are arranged in alphabetical order of their botanical names, their family, Sanskrit/ayurvedic name, botanical description, local name, field numbers, place of collection, distribution and parts used and their action etc.

1043. **Gautam, P. & Richhariya, G.P. 2015.** "Ethnoveterinary medicinal plants used by tribals and rural communities of Chitrakoot, Distt.- Satna (M.P.)". *Int. J. Pharm. Life Sci.* 6(4): 4427–4430. Abstract: In Chitrakoot of Satna (M.P.), tribal communities rear livestock mostly cattle, buffalo, goats, sheep etc. Most of the time animal diseases are treated by the use of local medicines extracted from the different part of the plant. All together 23 plant species belonging to 20 families are being identified having used to treat different veterinary diseases like injury, poisoning foot and mouth, wounds, stomach disorder, ant worms and bone fracture of animals these ethnoveterinary plant species are normally collected from nearby forest or natural vegetation.
1044. **Gautam, P. & Richhariya, G.P. 2015.** "Folk veterinary medicine in Parasmaniya Satna (Madhya Pradesh)". *Int. J. Pharm. Life Sci.* 6(4): 4441–4444. Abstract: Animal and plant relationship has been continuing since time immemorial. Ancient man had discovered natural products to satisfy his needs including relief from his personal ailments as well as of his fellow domestic animals. Very little of this knowledge has been recorded. So this study aims to document folk medicinal knowledge of plants used for treatment of livestock. In Parasmaniya, information on these veterinary practices was gathered by the interviewing and discussions with key research participants. People of Parasmaniya for treatment of different diseases, viz, body pain, lice, anthrax.
1045. **Gautam, S. 2009.** *Antimicrobial activities of some medicinal plants use by tribal people to cure skin diseases.* Ph.D. Thesis, Jiwaji University, Gwalior. (Unpublished).
1046. **Ghaghat, S. & Sahu, Brajesh. 2006.** "Medicinal climbers of Vidisha district". *Int. J. Appl. Life Sci.* 1(1): 24–25.
1047. **Ghaghat, S., Shrivastava, P.N. & Sahu, Brajesh. 2006.** "Some ethnomedicinal herbs of Vidisha district of Madhya Pradesh". *Int. J. Appl. Life Sci.* 1(2): 53–54.
1048. **Gond, D.K., Tripathi, S., Srivastava, M.N. & Saini, D.C. 2014.** "Ethno-botanical study of some medicinal plants used by Gond tribe of Korba district (Chhattisgarh), India". *Ethnobotany* 26: 90–95. Abstract: The present communication provide information of 48 plants belonging to 31 families used by Gond tribe of Korba district, Chhattisgarh, India as medicine in the treatment of different diseases like bleeding, leprosy, blood purifier, piles, etc. Out of these uses of 21 plants are new while 27 have common therapeutic uses reported by other tribal communities mentioned in the dictionary of Indian Folk Medicine and Ethnobotany and others; however additional information is being reported for 8 plants also.

1049. **Goswami, O.G. & Bhatnagar, P. 2008.** "Economic return from cultivation of some medicinal plants in Amarkantak (Madhya Pradesh)". *Vaniki Sandesh* 14(3): 5–9. Abstract: Forests abound in a large variety of Medicinal and aromatic plants. The rural and tribal population depend upon several plant species for their medicinal requirements. Unfortunately many such species are rapidly disappearing. The paper highlights cultivation technique and economic returns from four important medicinal plants occurring in the National forest of the State viz., *Acorus calamus* (Bach), *Rauvolfia serpentina* (Sarpagandha), *Chlorophytum tuberosum* (Safed Musli) and *Curcuma angustifolia*.
1050. **Gupta, A., Sahu, T.R. & Tiwari, E. 2005.** "Ethnobotanical importance of some common aquatic and marshy plants of Sagar district". *J. Bot. Soc. Univ. Sagar* 40: 63–73. Abstract: The aquatic and marshy plants are still regarded by general mass of people as a 'menace' and a 'nuisance', because they are not yet aware of the great potential and economic value of these profusely growing, uncontrollable plants. These highly productive plants are generally more productive than conventional terrestrial crops. These plants have a good sources of livestock feed, human food, fish feed, organic or bio-fertilizer, energy, fibre and paper. They meet various requirements from food to medicine of tribal & rural people & their domestic animals. In present paper 45 ethnobotanically important aquatic and marshy plants used by the rural and tribal people are dealt with.
1051. **Gupta, A.K. & Mishra, S.K. 2000.** "Less known food plants used by tribals of Shahdol district, Madhya Pradesh, India". *Advances Pl. Sci.* 13(I): 383–385. Abstract: An ethnobotanical study was carried out among the tribals of Shahdol district, Madhya Pradesh to document food plants of tribal utility. Nineteen plant species belonging to 18 genera and 18 families were collected which are being used by tribals as supplementary source of food.
1052. **Gupta, A.K. & Mishra, S.K. 2000.** "Folklore dental protector plants of Chhattisgarh, Madhya Pradesh, India". *Advances Pl. Sci.* 13(II): 501–503. Abstract: Chhattisgarh is situated in the south east of Madhya Pradesh. It covers an area of 135113 sq. km. which is 30.52% of Madhya Pradesh. Forty percent geographical area of Chhattisgarh is forested. The tribal live hills and forests, and about half the tribal area is included in the forest, with rich natural resources. Forest plays a vital role in the tribal economy and culture. The paper deals with the folklore use of 17 plant species occurring in Chhattisgarh of Madhya Pradesh for curing dental ailments.
1053. **Gupta, A.K. & Mishra, S.K. 2002.** "Indigenous phytotherapy for diabetes from Chhattisgarh". *Advances Pl. Sci.* 15(II): 407–409. Abstract: In India, diabetes has been concerned as a disease of common people. It is a dexterous disease marked by excessive flow of sugar-urine due to failure of pancreas to produce insulin. In the state of



Chhattisgarh indigenous phytotherapy upon diabetes is well informed. In this paper the same has been reported in relation to oral administration lead on 20 plant species.

1054. **Gupta, A.K., Mishra, S.K. & Khan, A.A. 1999.** "Ethnobotanical notes on some herbs from Chhattisgarh region of Madhya Pradesh". *Advances Pl. Sci.* 12(I): 163–166. Abstract: The results of an ethnobotanical study in the Chhattisgarh region of Madhya Pradesh are presented. The uses of 27 plant species curing several diseases especially skin diseases are enumerated and presented in alphabetical order followed by their local names and locality.
1055. **Gupta, A.K., Mishra, S.K. & Khan, A.A. 1999.** "Ethnobotanical studies on medicinal plants of Amarkantak forest, Shahdol district, Madhya Pradesh". *Advances Pl. Sci.* 12(II): 451–456. Abstract: Amarkantak is situated about 105 km. South of Shahdol. It is the place of union of two mountain ranges, Vindhya and Satpura. The area is the source of three great rivers, Johilla, Narmada and Sone. The flora and fauna of this region is not only rich but also unique. A large number of tribals live here. Since no ethnobotanical studies have been undertaken till December 1994, in this paper some new facts about certain plant species and their utilization by tribals has been described.
1056. **Gupta, A.K., Mishra, S.K. & Khan, A.A. 2003.** "Multifarious uses of grasses (family Poaceae) of Shahdol". *Advances Pl. Sci.* 16(I): 33–35. Abstract: Multifarious uses of wild grasses of Shahdol district are reported in the present paper. Although Shahdol has no natural grasslands, but due to forest depletion extensive grass covers have developed. A total of 18 species are reported here which are used in different ways by the local people.
1057. **Gupta, D.K. & Gupta, G. 2017.** "Diversity of ethno medicinal plant in dist. Balod (C.G.)". *IOSR J. Pharm. & Biol. Sci.* 12(3): 80–89. Abstract: Ethno-botanical study on traditional medicinal plants was conducted in Balod district of Chattisgarh, India and documented different types of traditional medicinal plants used by the indigenous peoples. The study was focused on identifying medicinal plants with botanical name, family, local name, habit, parts used, methods of preparation, administration and ailments treated are provided. Baiga, Gond and Oraon are common tribal communities of Balod district and completely or partially dependent on forest product for their survival and livelihood. The data was collected using interview and questionnaires by selecting 16 healers using purposive sampling method. A total number of 166 species of plants belonging to 155 genera and 75 families have been recorded in study area of Balod. Total number of species, genera and families of both cultivated and wild category was studied. The present study highlights on traditional knowledge and ethno-medicinal observation in different areas of district Balod CG. The ethno medicinal information of tribal's peoples was collected from of the study sites and brief description of the plants will be discussed later.

1058. **Gupta, S.P. 1981.** Folklore about plants with reference to Munda culture. In: Jain, S.K. (Ed.), *Glimpses of Indian Ethnobotany*. Oxford & IBH, New Delhi. Pp. 199–207.
1059. **Gwalwanshi, D.R. & Bishwas, A.J. 2017.** "Documentation of ethnoveterinary medicinal flora of Balaghat district, Madhya Pradesh, India". *Int. J. Res. Ayurveda Pharma*. 8(Suppl. 2): 279–284. Abstract: This paper documented the ethno-veterinary studies carried out during 2013-2015 in the two forest divisions of Balaghat district of Madhya Pradesh. It is rich in ethnic and biological diversity. A large number of ethnic groups such as Baiga, Gond and Korku inhabit in this district and utilize wide variety of plant resources for food, fodder, fiber, and medicine. Therapeutic application of 46 plant species has been belonging 37 genera and 33 families. The result of this study show that tree species contributed the maximum having 43% followed by herbs 26%, shrub 24% and climber 7% of the total medicinal plants. These plants are used for a wide range of ailments such as fever, diarrhea, and bone fracture, treat infections with parasitic worms, and enhance the milk, snake bite. Most of the plant parts are harvested from the wild and majority of the preparation are paste. Leaves represent the most usable part. It has been observed that the species that are scarce locally in the forest due to various developmental activities, deforestation, over-exploitation are abundant in the ethnoveterinary information on medical claims was collected from the elderly people residing in the villages of forest area and also from the traditional healers called Vaidhya, Baigas etc. The study describes details of botanical identity, family, local name, parts of the plant used, therapeutic uses, and mode of application of the drug.
1060. **Gwalwanshi, D.R., Salunkhe, O., Shukla, A., Bishwas, A.J. & Vyas, D. 2014.** "Indigenous knowledge and documentation of ethno-medicinal plants of Panna district, Central India: A case study". *J. Ethnobiol. Tradit. Med.* 122: 868–876. Abstract: The main aim of present study is to explore the Indigenous Knowledge and Documentation of Ethno-medicinal Plants of Panna district of Bundelkh and region of Central India, because medicinal and herbal utility of this region has not been explored yet. The questionnaire method followed for documentation. The ethno-medicinal data on 88 plant species belonging to 75 genera of 37 families were recorded during field trips (February, 2012 to January, 2013). On the basis of our finding it is a great asset for herbal drug industries.
1061. **Gwalwanshi, D.R., Vyas, D., Bishwas, A.J., Salunkhe, O. & Tiwari, P. 2014.** "Ethnomedicinal and ecological studies on Fabaceae of Runj Forest Panna (MP), India". *Int. J. Recent Scientific Res.* 5(7): 1264–1269. Abstract: Ranipura, Vishramganj and Aaramganj are situated in Runj forest of Panna district, Madhya Pradesh. It is natural forest harbouring many wild varieties of plant species which have immense medicinal properties. Prompt with wealth of plants used as ethnomedicine by local healers. More importance to Fabaceae, because of its rich medicinal properties and therefore, we

collected and identified. The plants are *Abrus precatorius*, *Acacia Arabica*, *Acacia catechu*, *A. leucophloea*, *Albizia procera*, *Bauhinia variegata*, *B. Vahlia*, *B. Racemosa*, *Butea monosperma*, *Cassia angustifolia*, *C. tora*, *Crotalaria juncea*, *Dalbergia latifolia*, *D. Sissoo*, *Glycine max*, *Indigofera prostrata*, *Mimosa pudica*, *Phaseolus vulgaris*, *Tephrosia purpurea* and *Trigonella graceum*. During the study we mainly focused on documentation of traditional knowledge of local peoples about uses of native medicinal Fabaceous plants as ethno-medicine. The methods followed for documentation of indigenous knowledge was based on questionnaire, regular interviews and interaction with local communities. Outcome of the study suggest that local healers uses these plants for various ailments such as cough, dysentery, pyretic, snake bite, bronchitis, vomiting, ulcers, diarrhoea, fevers, skin diseases, problems of pregnancy, stomach-ache, etc.

1062. **Harinkhede, D.K. & Tripathi, S.S. 2006.** "Ethno-Veterinarian plants used by farmers of Miliwatershed Waraseoni, Distt.-Balaghat (M.P.)". *Vaniki Sandesh* 30(1): 28–30. Abstract: Miliwatershed Waraseoni in Balaghat district comprises of ten villages viz., Gatapayali, Ansera, Basi, Kochewahi, Budbuda, Narvanjpar, Botezari, Pounera, Bodalkosa and Khapa. Different communities of farmers live in these villages. They use their indigenous knowledge about plants for the treatment of different diseases in their cattle. The present paper deals with about 25 plant species used by the farmers of this miliwatershed for treatment of different diseases in cattle.
1063. **Harinkhede, D.K., Upadhyaya, S.D., Verma, S.K., Sharma, A. & Khare, A.K. 2014.** "Evaluation of tree species composition and utility in a rice-based traditional Agro Forestry System in South-Eastern parts of Madhya Pradesh". *J. Trop. Forest.* 30(4): 43–49. Abstract: The present study was conducted in south-eastern parts of Madhya Pradesh having a rice based traditional agroforestry system to understand the tree community structure and economic utilities. Farmer's fields in six districts namely, Jabalpur, Seoni, Narsinghpur, Balaghat, Umaria and Anuppur were selected for the study. In the present study, a total of 29 tree species of 18 families were recorded. Mimosaceae was the dominant family recorded with 4 tree species in the study area, followed by Combrataceae and Meliaceae with 3 tree species in each family. In ethnobotanical survey, very useful information was recorded about the economic utility of the tree species present. The species were recorded having medicinal, fuel, fodder, edible and timber uses. Maximum IVI was recorded in *Butea monosperma* (77.5428), followed by *Acacia nilotica* (66.8672), *Mangifera indica* (27.5849) and *Madhuca indica* (23.2627).
1064. **Heda, Nilesh. 2012.** "Folk conservation practices of the Gond tribal of mendha (Lekha) village of Central India". *Indian J. Tradit. Knowl.* 11(4): 727–732. Abstract: This paper gives insights in to folk conservation practices performed by the Gond tribal of the Mendha village of the Central India. The study performed during 2003-2004. The data has been generated through individual interviews, group discussion, attending

religious ceremonies, etc. All practices divided in to 3 broad types, viz. species level conservation efforts, ecosystem level conservation efforts and modern ways of the nature conservation. Species level conservation efforts visualized in to totemic species, species of the ritualistic or religious importance and other restraint on utilization of certain species. The ecosystem level conservation efforts mainly consist of sacred groves, sacred ponds, sacred pools along river, etc. The modern ways of the nature conservation in Mendha village are attributed to recent transformation of village due to its empowered Gramsabha (Village Council). The objectives of the study was to document the traditional wisdom of the local people regarding nature conservation so that same can be utilized and protected in the context of modern conservation practices.

1065. **Hemadri, K. 1981.** "Rheumatism: Tribal medicine". *Ancient Sci. Life* 1(2): 117–120. Abstract: Information on 22 claims of Tribal and other Folk-lore Medicine on Rheumatism, gathered from the aboriginals and villagers of Andhra Pradesh, Madhya Pradesh and Orissa States is presented in this article, proposing an in-depth study into these claims on the same lines as those formulated for Ayurvedic research and in accordance with the advice of the author of Dhanwantari Nighantu, vido Slokas 6 & 7.
1066. **Hemadri, K. & Rao, S.S. 1989.** "Folk medicine of Bastar". *Ethnobotany* 1: 61–66. Abstract: In this article, some folk remedies practised by Bastar tribals involving less known herbs such as *Ampelocissus tomentosa* for dysmenorrhoea; *Andrographis paniculata* for jaundice; *Bambusa arundinacea* and *Chloroxylon swietenia* for wounds; *Blepharispermum subsessile* for diarrhoea, joint pains and puerperal diseases; *Blumea fistulosa* as anthelmintic; *Blumea flava* for burns; *Butea superba* for haematuria; *Colebrookia oppositifolia*, *Helinus lanceolatus* and *Randia dumetorum* for cough; *Coldenia procumbens* for leucorrhoea and menorrhagia; *Dalbergia paniculata* and *Dalbergia volubilis* for diarrhoea; *Elephantopus scaber* for gonorrhoea; *Geodorum candidum* as an antidote for scorpion sting; *Flemingia nana* for oedema; *Paederia foetida* and *Taxillus tomentosus* for malarial fevers; *Peucedanum nagpurensis* for aphrodisiac property; *Smilax zeylanica* for its refrigerant and fertility promoting action and *Uraria picta* against snake poisoning, are presented. The root of *Achyranthes aspera* which is claimed by the Halbas of Sonpur to be an ideal antifertility agent effective for one menstrual cycle is noteworthy.
1067. **Jadhav, Dinesh. 2006.** "Ethno-medicinal survey of Maalgamdi in Ujjain district, Madhya Pradesh". *Ethnobotany* 18: 157–159. Abstract: Frequent ethno-medicinal surveys were conducted during August-September 2004 in Maalgamdi village of Ujjain district, Madhya Pradesh. Results of these surveys indicated that 22 plant species are interestingly used by the local inhabitants.
1068. **Jadhav, Dinesh. 2006.** "Plant sources used for the treatment of types of fevers by Bhil tribe of Ratlam District, Madhya Pradesh". *J. Econ. Taxon. Bot.* 30(4): 909–911. Abstract: The paper provides information on the use of plant-based crude drugs for the treatment

of different types of fevers prevalent in Bhil tribe of ratlam district, Madhya Pradesh. It deals with 15 species belonging to 15 genera of 15 families used for this purposes. Under each species, the botanical names followed by local names and parts used have been given. The present information will provide a platform to the phytochemists to play upon.

1069. **Jadhav, Dinesh. 2006.** "Ethnomedicinal plants used for curing skin afflictions by Bhil tribe of Ratlam district, Madhya Pradesh". *J. Econ. Taxon. Bot.* 30 (Suppl.): 124–127. Abstract: The paper provides information on the use of plant-based crude drugs for the treatment of different types of skin diseases prevalent in Bhil tribe of ratlam district, Madhya Pradesh. About 25 plant species under 25 genera belonging to 20 families have been identified for the treatment. The Bhil tribe of the area totally depend on the herbal drugs for their primary health care which is attributed partly to their socio-economic and cultural conditions.
1070. **Jadhav, Dinesh. 2006.** "Unreported ethnomedicinal uses of *Calotropis gigantea* (L.) R. Br. (Asclepiadaceae) among the tribals of Ratlam district, Madhya Pradesh". *J. Non-Timber Forest Prod.* 13(1): 53–54. Abstract: Information about ethnomedicinal uses of *Calotropis gigantea* (L.) R. Br. of family Asclepiadaceae gathered from the tribals of Ratlam district (M.P.) has been dealt with in this communication. It has been observed that the uses recorded for the treatment of some diseases prevalent in Bhil tribe of Ratlam district (M.P.) are new to ethno-medico-botany.
1071. **Jadhav, Dinesh. 2006.** "Commercial non-timber forest products collected by the Bhil tribe in Shivgarh town of Ratlam district, Madhya Pradesh". *J. Non-Timber Forest Prod.* 13(4): 295–296. Abstract: The study documents the commercial NWFPs, collected and marketed by the tribals in Shivgarh town of Ratlam district, Madhya Pradesh. These tribals collecting a total of 33 products as commercial NTFPs which are sold in the open weekly tribal market by the tribal people. Buyers come from within and around the town. Women constitute over 90% of the traders in these markets.
1072. **Jadhav, Dinesh. 2006.** "Ethnomedicinal plants used by Bhil tribes of Bibdod, Madhya Pradesh". *Indian J. Tradit. Knowl.* 5(2): 263–267. Abstract: The paper provides information on the use of plant crude drugs for various diseases prevalent in *Bhil* tribe of Bibdod village of Ratlam district, Madhya Pradesh. The paper deals with 62 plant species belonging to 57 genera of 40 families used for different diseases by the tribe. For each species, the information regarding botanical names, local names, parts used and ethnomedicinal uses have been provided.
1073. **Jadhav, Dinesh. 2007.** "Ethno-medicinal plants used by Bhil tribe of Matrunda, district, Ratlam, Madhya Pradesh, India". *Bull. Bot. Surv. India* 49(1-4): 203–206. Abstract: In this paper, 40 species belonging to 38 genera of 28 families used for the treatment of different types of diseases by Bhil tribe of village Matrunda has been provided. Each

botanical name is followed by local name, uses and parts used.

1074. **Jadhav, Dinesh. 2007.** "Unreported ethnomedicinal uses of *Bombax ceiba* (Bombacaceae) among the Bhil tribes of Ratlam district (MP)". *Ethnobotany* 19(1&2): 142–143. Abstract: Information on ethnomedicinal uses of *Bombax ceiba* L. (Bombacaceae) gathered from the Bhil tribes of Ratlam district (M.P.) has been dealt within this communication. These uses are interesting and new to ethnomedicobotany.
1075. **Jadhav, Dinesh. 2007.** "*Typha elephantiana* Roxb. (Typhaceae)– A wonderful wound-healer from Bhil tribe of Ratlam district (Madhya Pradesh)". *Indian Forester* 133(6): 851–852. Abstract: 'Her Ka Bur' (*Typha elephantina* Roxb.) has been found to be a wonderful wound healer. Application of the 'Her Ka Bur' stops bleeding forthwith, checks pus formation during bandage and the wound heals up quickly. It is likely that some antibiotic property associated with the plant species prevents pus formation in a chronic wound.
1076. **Jadhav, Dinesh. 2007.** "Ethno-medicinal plants used in the treatment of diarrhoea and dysentery by Bhil tribe of Ratlam district (Madhya Pradesh)". *Indian Forester* 133(8): 1097–1100. Abstract: The paper provides information on the use of plant crude drugs for the treatment of diarrhoea and dysentery by the Bhil tribe of Ratlam District (M.P.). It deals with 25 plant species under 23 genera belonging to 20 families for the treatment of these afflictions. The Bhils of the area depend totally on herbal drugs for their primary health care which is attributed partly to their socio-economic and cultural conditions.
1077. **Jadhav, Dinesh. 2007.** "A note on some ethnomedicinal plants found effective in the treatment of typhoid used by Bhil tribe of Ratlam district (Madhya Pradesh)". *J. Non-Timber Forest Prod.* 14(3): 225–226. Abstract: The paper provides information on the use of plant crude drugs the treatment of typhoid by Bhil tribe of Ratlam district (M.P.). It deals with 17 plants species under 17 genera belonging to 13 families for the treatment of typhoid. The Bhil tribe of the area totally depend on the herbal drug for their primary health care which is attributed partly to their socio-economic and cultural conditions.
1078. **Jadhav, Dinesh. 2007.** "Ethnomedicinal plants used in the treatment of joint diseases by Bhil tribe of Ratlam district (Madhya Pradesh)". *J. Non-Timber Forest Prod.* 14(4): 313–314. Abstract: Information on the use of plant crude drugs for joint diseases by Bhil tribe of ratlam district (M.P.) is presented. 15 species belonging to 15 genera of 10 families have been found to be very effective in the treatment of joint diseases i.e. arthritis, gout, rheumatism, sciatica and lumbago.
1079. **Jadhav, Dinesh. 2008.** *Medicinal plants of Madhya Pradesh & Chhattisgarh.* Daya Publishing House, New Delhi.
1080. **Jadhav, Dinesh. 2008.** "Amulets and other plant wearings believed to be contact therapy among tribals of Ratlam district (M.P.)". *Ethnobotany* 20(1&2): 144–146. Abstract:

Frequent ethnomedicinal survey was conducted between August 2004 and March 2008 in different tribal inhabited villages of Ratlam district (M.P.). Results indicated that 14 plant species are interestingly used by the tribals through contact for various diseases.

1081. **Jadhav, Dinesh. 2008.** “*Enicostema lettorale* Blume (Gentianaceae): A wonderful ethnomedicinal plant against gout, malaria and typhoid”. *Indian Forester* 134(8): 1100–1102. Abstract: *Enicostema lettorale* Blume (Gentianaceae) is a valuable & remarkable ethnomedicinal plant used by Bhil tribe of Ratlam District (M.P) in the treatment of Gout, Malaria and Typhoid. The species is under threat due to over-exploitation for its medicinal properties, indicating an urgent need for conservation of the species.
1082. **Jadhav, Dinesh. 2008.** “A survey of herbaceous ethnomedicinal plants used in the treatment of various ailments prevalent in the Bhil tribe of Ratlam district (Madhya Pradesh) India”. *J. Drug Res. Ayurved. Sci. (JDRAS)* 29(1&2): 7–14.
1083. **Jadhav, Dinesh. 2008.** “Unreported ethnomedicinal uses of *Butea monosperma* (Lam.) Taub. (Fabaceae) among the tribals of Ratlam District (Madhya Pradesh). *J. Non-Timber Forest Prod.* 15(1): 73–74. Abstract: Information about ethnomedicinal uses of *Butea monosperma* (Lam.) Taub. of family Fabaceae gathered from the tribals of Ratlam district (M.P.) has been dealt with in this communication. It has been observed that the uses of recorded for the treatment of some diseases prevalent in Bhil tribe of Ratlam district (M.P.) are new to ethno-medico-botany.
1084. **Jadhav, Dinesh. 2008.** “Ethnomedicinal plants remedies for snake bite and scorpion sting among the Bhil tribes of Ratlam District, Madhya Pradesh”. *J. Non-Timber Forest Prod.* 15(2): 127–128. Abstract: The paper on the ethnomedicinal plant remedies for snake bite and scorpion sting among the Bhil tribe of Ratlam district (M.P.). It deals 23 plant species under 21 genera and 15 families. The local names, the method of preparation and mode of use of the plants are mentioned.
1085. **Jadhav, Dinesh. 2009.** “Ethnomedicinal plants used in leaf therapy at Ratlam district of Madhya Pradesh”. *Ethnobotany* 21(1&2): 84–90. Abstract: Leaf therapy is an old practice among the tribals in Ratlam district of Madhya Pradesh. In this therapy, locally available plant species are used for the prevention and cure of diseases. The tribals in the area were contacted and information on 70 species belonging to 64 genera under 39 families from different pockets was documented. This knowledge has not been recorded earlier from the reported site.
1086. **Jadhav, Dinesh. 2009.** “Ethnomedicinal plants used for dental troubles by the Tribes of Ratlam District (Madhya Pradesh)”. *Indian Forester* 135(1): 140–142. Abstract: The paper provides some interesting uses of 17 ethnomedicinal plants used by Bhil tribe of Ratlam District (M.P.) for the treatment of various dental troubles including toothache and pyorrhoea. The ethno-medicinal data needs verification on chemical and pharmacological

grounds. Clinical trials on biological activities to improvise their efficacy and safety are also required.

1087. **Jadhav, Dinesh. 2009.** "Ethno-medicinal studies on plants used in the treatment of urino-genital diseases by Bhil tribe of Ratlam District (Madhya Pradesh)". *J. Drug Res. Ayurved. Sci. (JDRAS)*30(1&2): 9–18.
1088. **Jadhav, Dinesh. 2009.** "Plants used in the treatment of various ailments by the Bhil tribe of Ratlam District (Madhya Pradesh)". *J. Econ. Taxon. Bot.* 33(Suppl.): 59–62. Abstract: Frequent ethnomedicinal surveys were conducted between August 2004 to June 2006 in different tribal villages of Ratlam district. Results of these survey indicated that 44 plant species are interestingly used for the treatment of different type of diseases prevalent in the tribal people of the district. Botanical names, followed by family, local names and the ethnomedicinal uses have been provided.
1089. **Jadhav, Dinesh. 2009.** "Ethnoveterinary plants from tribal inhabited localities of Ratlam District (M.P.)". *J. Econ. Taxon. Bot.* 33(Suppl.): 64–67. Abstract: Frequent ethnobotanical surveys were conducted between August 2004 to June 2006 in different tribal villages of ratlam district. Results of these surveys indicated that 21 plant species are used in ethnoveterinary medicines by the tribal people of the district. Botanical names, followed by family, local names and the ethnoveterinary uses have been provided.
1090. **Jadhav, Dinesh. 2009.** "*Anisomeles indica* (L.) O. Kuntze (Lamiaceae): An ethnomedicine used for the treatment of rickets". *J. Non-Timber Forest Prod.* 16(1): 75. Abstract: *Anisomeles indica* (L.) O. Kuntze (Lamiaceae), a species distributed throughout India, has been found to be very effective in the treatment of rickets (bending and weakening of the bones) among the natives of nearly 50 villages of Ratlam district, Madhya Pradesh.
1091. **Jadhav, Dinesh. 2009.** "Plants used in the treatment of various human ailments by the Bhil tribe of Ratlam district (M.P.) India". In: Singh, V. (Ed.), *Ethnobotany and medicinal plants of India and Nepal*. Scientific Publishers, Jodhpur. Vol. 3. Pp. 59–63. Abstract: Frequent ethnomedicinal surveys were conducted between August 2004 to June 2006 in different tribal villages of Ratlam district. Results of these survey indicated that 44 plant species are interestingly used for the treatment of different type of diseases prevalent in the tribal people of the district. Botanical names, followed by family, local names and the ethnomedicinal uses have been provided.
1092. **Jadhav, Dinesh. 2009.** "Ethnoveterinary plants from tribal inhabited localities of Ratlam district (M.P.) India". In: Singh, V. (Ed.), *Ethnobotany and medicinal plants of India and Nepal*. Scientific Publishers, Jodhpur. Vol. 3, pp. 64–67. Abstract: Frequent ethnomedicinal surveys were conducted between August 2004 to June 2006 in different tribal villages of Ratlam district. Results of these survey indicated that 21 plant species are used in ethnoveterinary medicines by the tribal people of the district. Botanical names, followed by family, local names and the ethnoveterinary uses have been provided.



1093. **Jadhav, Dinesh. 2009.** “*Solanum nigrum*L. (Solanaceae): A new source for the treatment of rickets”. *J. Non-Timber Forest Prod.* 16(1): 75. Abstract: *Solanum nigrum*L. (Solanaceae), a species distributed throughout India, has been found to be very effective in the treatment of rickets (bending and weaking of the bones) among the natives of Ratlam district, Madhya Pradesh.
1094. **Jadhav, Dinesh. 2010.**”Ethno-gynaecological uses of plants by Bhil tribe of Ratlam district (M.P.)”. *Ethnobotany* 22: 138–141. Abstract: This paper reports the ethno-gynaecological uses of certain plants as practiced by the Bhil tribe of Ratlam district (M.P.). It deals with 42 plant species under 42 genera belonging to 31 families. The local names, the methods of preparation of drugs and modes of use of the plants are mentioned.
1095. **Jadhav, Dinesh. 2010.** “*Anisomeles indica* (L.) O. Kuntze (Lamiaceae): An ethnomedicine used for the treatment of peptic ulcer”. *Indian Forester* 136(4): 562. Abstract: *Anisomeles indica* (L.) O. Kuntze (Lamiaceae) has been found to be very effective for the treatment of peptic ulcer. This plant occurs commonly in wild in and around Ratlam district in western Madhya Pradesh as well as other parts of the country. This ethnomedicinal plant is interestingly used by the tribe of Ratlam district to cure peptic ulcer.
1096. **Jadhav, Dinesh. 2010.** “Ethnomedicinal plants used as antipyretic agents among the Bhil tribes of Ratlam District, Madhya Pradesh”. *Indian Forester* 136(6): 843–846. Abstract: Frequent ethnomedicinal surveys were conducted between August 2004 to March 2008 in different tribal inhabited villages of Ratlam district (Madhya Pradesh). Results of these surveys indicated that 28 plant species are used for the treatment of different type of fevers prevalent among the tribals. For each species the information relating to the botanical names followed by local names and parts used has also been given.
1097. **Jadhav, Dinesh. 2010.** “*Solanum surattense* Burm.f. (Solanaceae): An ethnomedicine for the treatment of dental caries”. *Indian Forester* 136(7): 986–989. Abstract: *Solanum surattense* Burm.f. (Solanaceae) has been found to be very effective for the treatment of dental caries or tooth decay. This valuable ethnomedicinal plant is interestingly used by Bhil tribe of Ratlam district (Madhya Pradesh) to cure their teeth troubles.
1098. **Jadhav, Dinesh. 2010.** “Fodder plants of tribal inhabited localities of Ratlam district, Madhya Pradesh”. *Indian Forester* 136(12): 1704–1708. Abstract: Frequent ethnobotanical surveys were conducted between August 2004 to March 2008 in different tribal inhabited villages of Ratlam district (Madhya Pradesh). The present communication describes 102 species belonging to 88 genera and 42 families which are sources of fodder used by bhil tribe of the district for their domestic animals. For each species informations regarding botanical name followed by local name, family, habit, status, parts used and the kind of animal fed are given.

1099. **Jadhav, Dinesh. 2010.** Ethnomedicinal plants used in the treatment of asthma by the Bhil tribe of Ratlam district (M.P.). In: Trivedi, P.C. (Ed.), *Ethnic Tribes and Medicinal Plants*. Pointer Publishers, Jaipur. Pp. 85–88.
1100. **Jadhav, Dinesh. 2010.** “A note on some ethnomedicinal plants found effective in the treatment of jaundice used by Bhil tribe of Ratlam district (M.P.)”. *J. Econ. Taxon. Bot.* 34(4): 751–753. Abstract: The paper provides information on the use of plant crude drugs in the treatment of jaundice by Bhil tribe of Ratlam district (M.P.). It deals with 9 plant species under 9 genera belonging to 9 families for the treatment of jaundice. The Bhil tribe of the area totally depends on the herbal drugs for their primary health care which is attributed partly to their socio-economic and cultural conditions.
1101. **Jadhav, Dinesh. 2010.** “Unreported ethnomedicinal uses of exotic weeds used by Bhil tribe of Ratlam district, Madhya Pradesh”. *J. Econ. Taxon. Bot.* 34(4): 754–756. Abstract: The paper provides the information on the ethnomedicinal uses of exotic plants used by Bhil tribe of Ratlam district, Madhya Pradesh, India. It deals with 11 species belonging to 11 genera of 10 families used by this tribe. For each species the information regarding botanical name, local name, parts used and ethnomedicinal uses have been provided. The Bhil tribe of the area totally depend on the herbal drugs for their primary health care which is attributed partly to their socio-economic and cultural conditions.
1102. **Jadhav, Dinesh. 2010.** “Piscicidal plants used by Bhil tribe of Ratlam district (M.P.), India”. *J. Econ. Taxon. Bot.* 34(4): 757–759. Abstract: Frequent ethnobotanical surveys were conducted between August 2004 to March 2007 in different tribal inhabited villages of Ratlam district. Results of these surveys indicated that 15 plant species are interestingly used by the tribals of the district for stupefying fish. These species are being reported for the first time from this region.
1103. **Jadhav, Dinesh. 2010.** “Socio-magico-religious beliefs about plants among the tribals of Ratlam district (M.P.), India”. *J. Econ. Taxon. Bot.* 34(4): 760–766. Abstract: Frequent ethnomedicinal surveys were conducted between August 2004 to March 2007 in different tribal inhabited villages of Ratlam district of Madhya Pradesh. Results of these surveys indicated that 35 plant species are interestingly used by the tribals of the district in socio-magico-religious beliefs. These plants are being reported for the first time from this region.
1104. **Jadhav, Dinesh. 2011.** “Ethnomedicinal survey of tribal inhabited localities of Ratlam district (MP) in the light of ‘doctrine of signatures’”. *Ethnobotany* 23: 121–124. Abstract: While human suffered in olden times from innumerable maladies and diseases, they experimented with plant cures. They thought the key to human use of plants was hidden in the form (signature) of the plant itself, so they looked closely for the label from God to recognise and utilize these plants for the benefit of life. Groups of plants sharing the same signature would hint at having similar healing properties of healing similar parts

of the body. An attempt has been made by the author towards understanding the origin of herbal medicines utilizing his own ethnobotanical studies in ratlam district. Some selected medicinal uses of plants have been studied critically for tracing their origin. Usually, the colour of the plant parts/products was found to be a useful indicator of its efficacy in treating various complaints, e.g. complaints related to breast milk, jaundice, eczema, blood dysentery, sexual impotency, etc. The appearance of plant part/body is also considered useful in many diseases, i.e. snake bite, scorpion sting, bone fractures, etc. Similarities of plant parts with human organs are inferred to have remedial significance for treatment of ailments of such organs.

1105. **Jadhav, Dinesh. 2011.** "Ethnomedicinal plants used in the treatment of various ailments by Bhil tribe of Ratlam district of Madhya Pradesh". *Indian Forester* 137(6): 777–785. Abstract: Frequent ethnomedicinal surveys were conducted between August 2004 to March 2007 in different villages of Ratlam district, Madhya Pradesh. Results of these surveys indicated that 68 plants species are interestingly used for the treatment of various diseases by the Bhil tribals of the district. Botanical names followed by family, local names and the ethnomedicinal uses have been provided.
1106. **Jadhav, Dinesh. 2011.** "Ethnomedicinal plants of Madhya Pradesh". *J. Econ. Taxon. Bot.* 35(2): 256–281. Abstract: Madhya Pradesh is rich in floristic as well as ethnic diversity. It comprises 45 districts and forest cover ca 30.9% of the total area of state. More than 41 tribal communities resides in or around the forests and depend mainly on forest resources for their daily requirements like food, fibre, fodder, gum, resin, tannin, wood, medicines and dyes. Presently, a number of ethnobotanical studies in different tribal inhabited localities of Madhya Pradesh are being carried out actively. The paper deals with the 340 species of probable medicinal potential, belonging to 270 genera and 95 families from Madhya Pradesh. These taxa are used for curing various ailments among the different ethnic societies. The information has been gathered by field survey and from available literature.
1107. **Jadhav, Dinesh. 2011.** "Wild plants used as a source of food by the Bhil tribe of Ratlam district (Madhya Pradesh)". *J. Econ. Taxon. Bot.* 35(4): 707–710. Abstract: The study documents 59 wild plants used as a source of food by Bhil tribe of Ratlam district (M.P.). For each species, the information regarding botanical name, local names, parts used and seasonal availability have been provided.
1108. **Jadhav, Dinesh. 2011.** "Exotic ethnobotanical plants from Ratlam district, Madhya Pradesh, India". *J. Non-Timber Forest Prod.* 18(2): 171–174. Abstract: Ethnobotanical especially naturalised exotic plants, study in Ratlam district revealed that many angiosperms species of exotic origin are employed for the treatment of various ailments. The first-hand data was obtained from Bhil tribe of the district. They are employed for medicine (57 uses) and other uses (14 uses). The paper deals with 26 exotic angiosperm

plant species belonging to 19 families and 25 genera used by this tribe. For each species the information regarding botanical names, local names, parts used and ethnobotanical uses have been provided. 50% (12 out of 26 species) exotic ethnobotanical plants came from America alone.

1109. **Jadhav, Dinesh. 2012.** "Totemy plants associated with different clans of Ratlan district (Madhya Pradesh) and their role in conservation". *Ethnobotany* 24: 54–58. Abstract: The social organization of the Bhil of Ratlam is based upon the clans. Various clans are named after certain plants; this fact plays a significant role in conservation of nature. The present paper deals with 21 such plant species, which are the totems of 40 clans of Bhils. The Bhil tribals worship the plants of their respective clans and do not use them in any form.
1110. **Jadhav, Dinesh. 2012.** "Forest plants used in the treatment of various ailments found in the Bhil tribe of Ratlam district (M.P.), India". *Indian Forester* 138(8): 733–736. Abstract: Frequent ethnomedicinal surveys were conducted between August 2004 to August 2008 in different tribal inhabited villages of Ratlam district, Madhya Pradesh. Results of the use of these surveys indicated 50 forest plant species for the treatment of different type of diseases prevalent in the tribal people of the district. Botanical names followed by family, local names, voucher specimen numbers and the ethnomedicinal uses have been provided.
1111. **Jadhav, Dinesh. 2012.** "Medicinal flora of Madhya Pradesh— A review". *J. Econ. Taxon. Bot.* 36(1): 118–155. Abstract: Madhya Pradesh is known to harbour a rich wealth of medicinal plants. An attempt has been made to prepare a detailed account of medicinal flora of Madhya Pradesh. The paper deals with the 424 species of probable medicinal potential, belonging to 333 genera and 103 families from Madhya Pradesh. The information has been gathered from available literature on medicinal plants. This paper is an effort to put together the vast variety of medicinal plants found in Madhya Pradesh.
1112. **Jadhav, Dinesh. 2012.** "Multipurpose uses of ethnobotanical plants from tribal inhabited localities of Ratlam district, Madhya Pradesh". *J. Non-Timber Forest Prod.* 19(1): 69–76. Abstract: Frequent ethnobotanical surveys were conducted between August 2004 to March 2008 in different tribal inhabited villages of Ratlam district (M.P.) to identify the multipurpose usable plants in the tribal inhabited villages. Results of these surveys indicated that 210 angiosperm plant species of 178 genera under 71 families are used by the tribal people of the district. The tribal people traditionally used 69 species as wild edibles, 26 species as fodder, 11 species as timber, 3 species for gum and resins, 14 species for dye and tannins, 6 species for fuel, 187 species for medicinal purposes, 29 species as medico-religious beliefs, 12 species as fish poison, 3 species for agricultural implements, 6 species as oil yielding plants and 10 species for biofencing purposes. For each species the information regarding the botanical names, local names,

family and ethnobotanical uses have been provided.

1113. **Jadhav, Dinesh. 2012.** "Ethnobotanical plants used in the treatment of the various respiratory disorders prevalent in the Bhil tribe of Ratlam district, Madhya Pradesh". *J. Non-Timber Forest Prod.* 19(3): 219–222. Abstract: Frequent ethnobotanical surveys were conducted between August 2004 to March 2008 in different villages of Ratlam district. Results of these surveys indicated that 36 plant species are interestingly used for the treatment of various respiratory disorders such as asthma, cough and cold, throat infection, hoarseness, tuberculosis, pneumonia etc. prevalent in the Bhil tribe of the district. Botanical names followed by family, local names and the ethnomedicinal uses has been provided.
1114. **Jadhav, Dinesh. 2013.** "Medicinal flora of Chhattisgarh– A review". *Indian Forester* 139(2): 131–149. Abstract: Chhattisgarh is known to harbour a rich wealth of medicinal plants. An attempt has been made to prepare a detailed account of medicinal flora of Chhattisgarh. The paper deals with 292 species of medicinal plants belonging to 240 genera and 88 families from Chhattisgarh. The information has been gathered from available literature on medicinal plants.
1115. **Jadhav, Dinesh. 2013.** "Ethnomedicinal uses of Fabaceae among the tribals of Ratlam district (M.P.)". *J. Econ. Taxon. Bot.* 37(3): 449–452. Abstract: Ethnobotanical field survey was conducted in the tribal pockets of Ratlam district of Madhya Pradesh. During the survey, first hand information on ethnomedicinal plants was collected from the tribal informants comprising Bhopas and Medicinemen. In this paper, medicinal uses of 14 taxa of Fabaceae are reported along with their formulations for the treatment of various human ailments.
1116. **Jadhav, Dinesh. 2013.** "*Wrightia tinctoria* R. Br. (Apocynaceae): An ethnomedicine used for the treatment of rheumatism disorders". *J. Econ. Taxon. Bot.* 37(3): 453–455. Abstract: Information on ethno-medicinal use of *Wrightia tinctoria* (Roxb.) R. Br. (Apocynaceae) in the treatment of rheumatic disorders gathered from the Bhilala tribes of Dhar district (M.P.) has been dealt with in this communication. These are interesting and new to ethno-medico-botany.
1117. **Jadhav, Dinesh. 2013.** "*Medicago sativa* L. (Fabaceae): An ethnomedicine used for the treatment of night blindness by the Bhil tribe of Ratlam district (M.P.)". *J. Econ. Taxon. Bot.* 37(4): 611–613. Abstract: Information on ethno-medicinal use of *Medicago sativa* L. (Fabaceae) in the treatment of night blindness gathered from the Bhil tribes of Ratlam district (M.P.) has been dealt with in this communication. These are interesting and new to ethno-medico-botany.
1118. **Jadhav, Dinesh. 2013.** "Ethnobotanical research in Madhya Pradesh– A review". *J. Econ. Taxon. Bot.* 37(4): 614–629. Abstract: Madhya Pradesh is rich in floristic and ethnic diversity. It comprises 50 districts and forests covers 30.9% of the total area of the state. More than 41 tribal communities reside in or around the forests and depend

mainly on forest resources for their daily requirements like food, fodder, fibre, gum, resin, tannin, wood, medicines, dye for ascertaining the ethnobotanical status of the state. Presently, there are a number of ethnobotanical studies in different tribal inhabited localities of Madhya Pradesh are being carried out actively. From the available literature on ethnobotany it is evident that more than 20 research papers on various aspects of ethnobotanical work done in Madhya Pradesh were published till 2013. Present work provides the information on ethnobotanical works taken up in the state in the last 50 years.

1119. **Jadhav, Dinesh. 2014.** "Studies on plants used in religious worship and festivals in Ratlam district of Madhya Pradesh". *Ethnobotany* 26: 77–83. Abstract: Man has been worshipping gods, goddesses and nature since the inception of human civilization. In Hindu communities, many plant species are used in traditional ceremonies, festivals, worships and rituals. Hindus of ratlam district also perform many types of traditional worship and celebrate many festivals in which many plants species are used. It was observed that 77 plant species belonging to 65 genera and 38 families have high utility and importance in various festivals and worships. Various plant parts like fruits (25), leaves (19), flowers (18), seeds (13) and entire plants (11) are used for religious purposes. The article attempts to highlight the importance of some plants known to be traditionally worshipped in the study area.
1120. **Jadhav, Dinesh. 2014.** "Ethnomedicinal notes on some poisonous plants used by Bhil tribe of Ratlam district (MP)". *Ethnobotany* 26: 84–89. Abstract: Frequent ethnobotanical surveys were conducted between August 2004 to December 2008 in different tribal inhabited villages of Ratlam district (MP). Results of these survey indicated that 46 poisonous plant species are interestingly used by the local inhabitants of Bhil tribe traditionally as medicine in the treatment of their routine ailments, however a large doses may be harmful and show poisonous activity due to the presence of some toxic chemical constituents. Some of them are very toxic and may result in death of man and animal. Botanical names followed by family, local names, voucher specimen number and ethnomedicinal uses have been furnished in the enumeration.
1121. **Jadhav, Dinseh. 2014.** "Utilization of some ethnobotanical plants as agricultural tools, musical instruments and domestic goods by the Bhil tribe of Ratlam district (M.P.)". *J. Non-Timber Forest Prod.* 21(3): 197–199. Abstract: Frequent ethnobotanical surveys were conducted between August 2004 to March 2008 in different tribal inhabited villages of Ratlam district (M.P.). These surveys were carried out to identify the multipurpose usable plants in the tribal inhabited villages of the district. Results of these surveys indicated that 24 angiospermic plant species of 23 genera under 19 families are used by the tribal people for making agricultural tools, musical instruments and domestic goods. For each species the information regarding the botanical names, local names,

family and ethnobotanical uses have been provided.

1122. **Jadhav, Dinseh.2014.** “*Phyllanthus niruri auct non* L. (Euphorbiaceae): A wonder drug against jaundice”. *J. Non-Timber Forest Prod.*21(4): 235–236. Abstract: Information about ethnomedicinal use of *Phyllanthus niruri auct non* L. (Euphorbiaceae) recorded from the tribals of ratlam district (M.P.) has been dealt with in this communication. It has ben observed that the plant species is acting like a wonder drug aganist jaundice.
1123. **Jadhav, Dinseh.2014.** “Ethnomedicinal uses of plant gums by the tribal of Ratlam district (M.P.)”. *J. Econ. Taxon. Bot.*38(3-4): 458–460. Abstract: Frequent ethnomedicinal surveys were conducted between August 2004 and March 2008 in different tribal inhabited villages of Ratlam district (M.P.). An effort has been made to explore some ethnomedicinal uses of gums obtained from 9 angiospermic plant species used by the tribal community. For each species the information relating to the botanical names followed by local names, method of administration and prescribed dose has also ben done.
1124. **Jadhav, Dinseh.2014.** “*Tridax procumbens* L. (Asteraceae) –An ethnomedicinal plant used for the treatment of bleeding piles by the Bhil tribes of Ratlam district (M.P.)”. *J. Econ. Taxon. Bot.*38(3-4): 461–463. Abstract: Numerous digestive disorders are commonly found today among the people of urban and rural areas of India due to their changed life style and faulty food habits; bleeding piles is one of them. On the other hand, constipation is also play an important role in that diseases. *Tridax procumbens* L. (Asteraceae) has been found to be very effective for the treatment of bleeding piles. This valuable ethnomedicinal plant is interestingly used by Bhil tribe of Ratlam district (M.P.) to cure their bleeding piles.
1125. **Jadhav, Dinseh.2014.** “Ethnomedicinal plants of Madhya Pradesh used as antipyretic agents”. *J. Econ. Taxon. Bot.*38(3-4): 464–474. Abstract: Madhya Pradesh is rich in floristic as well as ethnic diversity. It comprises 50 districts and forest covers 30.9% of the total area of the state. More than 41 tribal communities resides in and around the forests and depend mainly on forest resources for their daily requirements like food, fodder, fibre, gum, resin, tannin, wood, medicines, dye for ascertaining the ethnobotanical status of the state. Presently, there are a number of ethnobotanical studies in different tribal inhabited localities of Madhya Pradesh are being carried out actively. The paper deals with the 52 species of ethnomedicinal plants belonging to 50 genera and 37 families used as antipyretic agents by the tribals of Madhya Pradesh. The information has been gathered by field survey and from available literature.
1126. **Jadhav, Dinesh. 2015.** “Ethnomedicinal plants used in the treatment of various ailments by Bhils of Bhagwanpura village of Vidisha district (MP)”. *Ethnobotany* 27: 59–62. Frequent ethnomedicinal survey was conducted between August to December 2012 in Bhagwanpura village of Vidisha district (MP). Results of these survey indicated that 43 plant species are interestingly used by the local inhabitants of Bhil tribe.

1127. **Jadhav, Dinseh.2015.** “*Tridax procumbens* L. (Asteraceae): A wonderful wound-healer from Bhil tribe of Ratlam district (M.P.), India”. *J. Non-Timber Forest Prod.*22(1): 31–32. Abstract: *Tridax procumbens* L. (Asteraceae) has been found to be very effective wound-healer. This valuable medicinal plant is used by Bhil tribe of Ratlam district to cure cut, injuries/wounds.
1128. **Jadhav, Dinseh.2015.** “*Coleus aromaticus* Benth. (Lamiaceae): An ethnomedicinal plant used against dry cough by bhils of Ratlam district (M.P.)”. *J. Econ. Taxon. Bot.*39(1): 41–43. Abstract: Information about ethnomedicinal use of *Coleus aromaticus* Benth. (Lamiaceae) recorded from the tribals of Ratlam district (M.P.) has been dealt with in this communication. It has been observed that the plant species is acting like a wonder drug against dry cough.
1129. **Jadhav, Dinseh.2015.** “*Anisomeles indica* (L.) O. Kuntze (Lamiaceae): an ethnomedicine used for the treatment of mouth ulcer”. *J. Econ. Taxon. Bot.*39(1): 44–45. Abstract: Information about ethnomedicinal use of *Anisomeles indica* (L.) O. Kuntze (Lamiaceae) recorded from Ratlam district (M.P.) has been dealt with in this communication. It has been observed that the plant species is acting like a wonder drug against mouth ulcer.
1130. **Jadhav, Dinseh.2015.** “Ethnomedicinal plant used in the treatment of leucorrhoea and menorrhoea by the bhil tribe of Ratlam district (M.P.)”. *J. Econ. Taxon. Bot.*39(1): 94–97. Abstract: Frequent ethnobotanical surveys were conducted between August 2004 to December 2008 in different tribal inhabited villages of Ratlam district (M.P.). Results of these survey indicated that 21 ethnomedicinal plant species are interestingly used by the Bhil tribe traditionally as medicine in the treatment of leucorrhoea and menorrhoea. The paper deals 21 plant species under 21 genera belonging to 16 families. The local names, the method of preparation of drug and mode of uses of the plants are mentioned.
1131. **Jadhav, Dinseh.2015.** “*Hibiscus sabdariffa* L.: An ethnomedicine used for the treatment of night blindness by the bhil tribe of Ratlam district (M.P.)”. *J. Econ. Taxon. Bot.*39(1): 147–149. Abstract: Information on ethno-medicinal use of *Hibiscus sabdariffa* L., in the treatment of night blindness gathered from the Bhil tribes of Ratlam district has been dealt in this communication. These are interesting and new to ethno-medico-botany.
1132. **Jadhav, Dinseh.2015.** “*Calotropis gigantea* (L.) R. Br. (Asclepiadaceae): An effective ethnomedicine for the treatment of asthma”. *J. Econ. Taxon. Bot.*39(1): 150–152. Abstract: Information about ethnomedicinal use of *Calotropis gigantea* (L.) R. Br. (Asclepiadaceae) recorded from the tribals of Ratlam district (M.P.) has been dealt with in this communication. It has been observed that the plant species is acting like a wonder drug against asthma.
1133. **Jadhav, Dinseh.2015.** “Ethnomedicinal potential of weed plants of Chhattisgarh: A review”. *J. Econ. Taxon. Bot.*39(2): 282–289. Abstract: Chhattisgarh is rich in floristic as well as ethnic diversity. It comprises 16 districts and forest covers 46% of the total area of the state. More than 42 tribal communities resides in or around the forests and depend



mainly on forest resources for their daily requirements like food, fodder, fibre, gum, resin, wood, medicines, dye for ascertaining the ethnobotanical status of the state. Presently, there are a number of ethnobotanical studies in different tribal inhabited localities of Chhattisgarh are being carried out actively. The paper deals with the 75 weed species of probable medicinal potential, belonging to 65 genera and 31 families from Chhattisgarh. These taxa are used for curing various ailments among the different ethnic societies. The information has been gathered by field survey and from available literature.

1134. **Jadhav, Dinseh.2015.** “*Tinospora cordifolia* Miers. (Menispermaceae): A new source for the treatment of psoriasis”. *J. Non-Timber Forest Prod.*22(1): 51–52. Abstract: The stem of *Tinospora cordifolia* Miers (Menispermaceae) used by the tribal people of the district Ratlam, Madhya Pradesh to cure psoriasis (a condition characterised by the eruption of circumscribed discrete and confluent reddish, silvery scaled lesions). Modern medicines do not have any cure of the disease, except their temporary relief. However, traditional herbal remedies do have a cure. This species is excellent remedy for psoriasis.
1135. **Jadhav, Dinseh.2015.** “Ethnomedicinal plants used for sexual debility by Bhil tribe of Ratlam district (Madhya Pradesh)”. *J. Non-Timber Forest Prod.*22(3): 173–175. Abstract: The present paper gives the information on aphrodisiac effect of some ethnomedicinal plants covers an area inhabited by Bhil tribe of Ratlam district (M.P.). It deals 29 plant species under 26 genera belonging to 20 families. The botanical names followed by local names, family, VSN, the method of preparation of drug and mode of uses of the plants are mentioned.
1136. **Jadhav, Dinseh.2015.** “Ethnomedicinal potential of exotic plants of Madhya Pradesh”. *J. Non-Timber Forest Prod.*22(4): 239–242. Abstract: An attempt has been made to prepare a detailed account on ethnomedicinal uses of exotic plants species of Madhya Pradesh. In the present paper the ethnomedicinal uses of 63 exotic angiospermic plant species belonging to 32 families and 58 genera are described used by local tribes of the state. For each species the information regarding botanical names, family, local names, nativity, parts used and ethnomedicinal uses have been provided. 40% exotic plants came from America alone. The information has been gathered by field survey and from available literature.
1137. **Jadhav, Dinesh.2016.** “Traditional seed therapy among Bhils of Ratlam district of Madhya Pradesh, India”. *Ethnobotany* 28: 77–81. Abstract: Plants used by tribals in seed therapy have been enumerated. Seed therapy is an old practice among the tribals in Ratlam district of Madhya Pradesh. In this therapy locally available plant species are used for the prevention and cure of the diseases. The tribals were contacted and the information on 50 species belonging to 47 genera under 28 families from different pockets was documented.

1138. **Jadhav, Dinseh.2016.** "Ethnomedicinal uses of subterranean plant parts of Ratlam district, Madhya Pradesh, India". *J. Econ. Taxon. Bot.*40(1-2): 5–9. Abstract: Ethnobotanical survey conducted during August 2004 to December 2008 in the tribal inhabited villages of Ratlam, district, Madhya Pradesh, revealed the use of underground plant parts such as root, bulb and corm or rhizome of 50 species representing 47 genera and 35 families by the Bhil tribes in traditional medicine to treat the common ailments affecting them and their pet animals. The vernacular and scientific names of the ethnomedicinal plants, the method of preparation of the drugs and mode of usage are documented.
1139. **Jadhav, Dinseh.2016.** "*Holoptelea integrifolia* (Roxb.) Planch. (Ulmaceae): A wonderful ethnomedicine from Bhil tribe of Ratlam district, Madhya Pradesh". *J. Non-Timber Forest Prod.*23(2): 103–104. Abstract: *Holoptelea integrifolia* (Roxb.) Planch. (Ulmaceae) has been found to be very effective herbal healer. This valuable ethnomedicinal plant is used by Bhil tribe of Ratlam district (Madhya Pradesh) to cure sprain as well as injuries.
1140. **Jadhav, Dinseh.2016.** "*Calotropis gigantean* (L.) R. Br. (Asclepiadaceae): An effective ethnomedicine for the treatment of jaundice". *J. Non-Timber Forest Prod.*23(3): 151–152. Abstract: Information about an interesting and hitherto unknown ethnomedicinal use of *Calotropis gigantean* (L.) R. Br. (Asclepiadaceae) recorded from the urban and rural area of Ratlam district (M.P.) has been dealt with in this communication. It has been observed that the plant species is acting like a wonder drug against jaundice. This is interesting and new to ethno-medico-botany.
1141. **Jadhav, Dinseh.2016.** "*Zea mays* L. (Poaceae) – An ethnomedicinal plant used in the treatment of kidney stone by native folklore of Ratlam district (Madhya Pradesh)". *J. Non-Timber Forest Prod.*23(4): 233–234. Abstract: Corn silk is an important herb used traditionally by the native Indians to treat many diseases. It is also used as traditional medicine in many parts of the world such as China, Turkey, United States and France. In present study it has been found to be very effective for the treatment of kidney stone. This valuable ethnomedicinal plant is interestingly used by the inhabitants of Ratlam district (M.P.) to cure their kidney stone.
1142. **Jadhav, Dinseh.2017.** "A survey on therapeutic uses of bark drugs obtained from tree species found in Madhya Pradesh". *J. Non-Timber Forest Prod.*24(2): 101–104. Abstract: Madhya Pradesh is known to harbour a rich wealth of medicinal plants. An attempt has been made to prepare a detailed account on therapeutic uses of bark drug obtained from tree species found in Madhya Pradesh state. The paper deals with the 72 barks of tree species of probable medicinal potential, belonging to 56 genera and 33 families. The information has been gathered from available literature on medicinal plants and field surveys.
1143. **Jadhav, Dinseh.2017.** "Ethnomedicinal plants of Madhya Pradesh used in the treatment of rheumatic disorders: A review". *J. Non-Timber Forest Prod.*24(3): 179–183. Abstract:

Madhya Pradesh is rich in floristic as well as ethnic diversity. It comprises 50 districts and forest covers 30.9% of the total area of the state. More than 41 tribal communities resides in and around the forests and depend mainly on forest resources for their daily requirements like food, fodder, fibre, gum, resin, tannin, wood, medicines, dye for ascertaining the ethnobotanical status of the state. Presently, there are a number of ethnobotanical studies in different tribal inhabited localities of Madhya Pradesh are being carried out actively. The paper deals with the 99 species of ethnomedicinal plants belonging to 95 genera and 51 families used in the treatment of rheumatism by the tribals of Madhya Pradesh. The information has been gathered by field survey and from available literature.

1144. **Jadhav, Dinseh.2017.** "Ethnomedicinal plant remedies for snake bite and scorpion sting among the tribal communities of Madhya Pradesh: A review". *J. Non-Timber Forest Prod.*24(4): 243–247. Abstract: The paper deals with 61 ethnomedicinal plant species belongs to 57 genera and 38 families are used by local tribals of Madhya Pradesh against snake bite and scorpion sting. Plants are herbaceous (24 species) followed by trees (17 species), shrubs (12 species), climbers (4 species) and perennial sedge (1 species). Most of the species (out of 61) are used against snake bite (45 species), 9 species are used against scorpion sting and 7 species are used against both snake bite and scorpion sting. The information has been gathered through field surveys and from available literature.
1145. **Jadhav, Dinesh&Rawat, S.S. 2011.** "Ethnomedicinal plants used in the treatment of various ailments by Bhilala Tribe of Alirajpur District (MP)". *J. Econ. Taxon. Bot.* 35(4): 654–657. Abstract: Frequent ethnomedicinal surveys were conducted between August 2009 to January 2011 in different tribal inhabited villages of Alirajpur district, Madhya Pradesh. Results of these surveys indicated that 34 plant species are used for the treatment of different human ailments by the *Bhilala* tribe of the district. Botanical names followed by family, local names and the ethnomedicinal uses have been provided.
1146. **Jain, A.K. 1988.** "Tribal clans in Central India and their role in conservation". *Environm. Conserv.* 15: 368.
1147. **Jain, A.K. 1992a.** "Clans of Sor tribals of Madhya Pradesh and their role in conservation". *Ethnobotany* 4: 67–69. Abstract: The Sor tribals inhabit mostly in four districts of Madhya Pradesh. There are about 28 types of clans among these tribals, and 12 of them have been named after plants. Various taboos and totems are associated with these plants. These clans play an important role in conservation.
1148. **Jain, A.K. 1992b.** "Ethnobotanical study of Sahariya tribals of Madhya Pradesh with special reference to medicinal plants". *J. Econ. Taxon. Bot.* 16: 227–232.
1149. **Jain, A.K. 1992c.** "Ethnobotanical studies on 'Sahariya' tribe of Madhya Pradesh with special reference to medicinal plants". *J. Econ. Taxon. Bot., Addit. Ser.* 10: 227–232.

Abstract: The 'Sahariya tribals' are living in about four districts of northern Madhya Pradesh. These tribals are mostly dependent on nearby forests for their day to day requirements. A list of thirty four plants in the life of Sahariyas is given along with their medicinal uses and vernacular names. A large number of plants are used for food, fuel, and performing various rituals and ceremonies. The clans and certain 'Taboos' of these tribals are closely related with plants. The socio-economic set up also reveals the importance of plants in the daily life of this tribe.

1150. **Jain, A.K. 1994.** "Conservation of *Commiphora mukul* through folk beliefs and taboos-A case study in central India". *Indian Mus. Bull.* 145-146.
1151. **Jain, A.K. 1995.** "Prospects of plantlore of Sahariya Tribe in the development of cottage industries". *Vanyajati* 3: 11-14.
1152. **Jain, A.K. 1995.** "Tattooing therapy among Sahariya tribal in central India". *Ethnobotany* 7(1&2): 108. Abstract: Sahariya tribals like to have tattooing to decorate parts of their body through imparting permanent pigmentation to skin in various designs. Tattooing is done using either pointed spines of some plants or copper needles. Plant species such as, *Boswellia serrata*, *Bombax ceiba*, *Azadirachta indica*, *Albizia lebbek*, *Echinocarpus echinatus*, *Pterocarpus marsupium* and *Euphorbia prostrate* are mostly used for making tattoo marks and staining. After tattooing the scars are washed several times with the decoction of these plant parts. It has been observed that tattooing is generally done to get relief from pains in various body parts.
1153. **Jain, A.K. 1997.** "Plantlore of northern Madhya Pradesh with special reference to their medicinal uses. In: Sharma, D. (Ed.), *Compendium on Phytomedicines*. Abhinav Printer, Delhi. Pp. 312-316.
1154. **Jain, A.K. & Patole, S.N. 2001.** "Less known medicinal uses of plants among some tribal and rural communities of Panchmari forest (M.P.)". *Ethnobotany* 13(1&2): 96-100. Abstract: Pachmarhi Biosphere Reserve, situated in Satpura hills of Madhya Pradesh, is a reservoir of biodiversity in India. A large number of rare and endemic plant species occur here in wild state. Several plants are being used by the tribals and local people for various purposes. The paper deals with some unrecorded ethnomedicinal uses of plants.
1155. **Jain, A.K. & Sharma, A.N. 2012.** "Impact of socio-religious beliefs and taboo practices on health status among the Baigas". *Int. J. Behavioural Social and Movement Sci.* 1(3): 1-8.
1156. **Jain, A.K. & Sharma, H.O. 1990.** "Certain medicinal plants used by Sahariya tribals of northern Madhya Pradesh". *Proc. Natl. Seminar Med. & Aromatic Pl. Jabalpur* 2: 155-165.
1157. **Jain, A.K. & Sharma, H.O. 1996.** "Ethnobiological studies Sahariya tribes of Central

- India. In: Jain, S.K. (Ed.), *Ethnobiology of Human Welfare*. Deep Publication, New Delhi. Pp. 397–399.
1158. **Jain, A.K. & Tiwari, P. 2012.** “Nutritional value of some traditional edible plants used by tribal communities during emergency with reference to Central India”. *Indian J. Tradit. Knowl.* 11(1): 51–57. Abstract: Paper deals with the study of a large number of plant species used by tribes in emergency, i.e. during scarcity of food. Information on uses of plants by tribes from abroad and various regions of India has been provided. Special emphasis has been made on estimation of nutritional value of plants consumed by Gond and Sahariya tribes of Central India.
1159. **Jain, A.K. & Tiwari, P. 2013.** Wild edible plants used as emergency food by tribals in India. In: Jain, S.K. & Jain, A.K. (Eds.), *An introduction to ethnobotany*, Deep Publ., New Delhi, Pp. 89–100.
1160. **Jain, A.K., Tiwari, P. & Bashir, M. 2010.** “Nutritive aspects of *Oxalis corniculata* L. used by tribal of central India during scarcity of food”. *J. Amer. Sci.* 6(11): 435–437.
1161. **Jain, A.K., Vairale, M.G. & Singh, R. 2010.** “Folklore claims on some medicinal plants used by Bheel tribe of Guna district Madhya Pradesh”. *Indian J. Tradit. Knowl.* 9(1): 105–107. Abstract: The paper deals about some medicinal plants used by tribal communities of Guna district of Madhya Pradesh. A record on 20 plant species belonging to 18 families, used by Bheel tribes for curing various ailments among human beings and animals are given. Uses of plants for other purposes are also mentioned.
1162. **Jain, A.K., Wagh, V.V. & Kadel, C. 2011.** “Some ethnomedicinal plant species of Jhabua district, Madhya Pradesh”. *Indian J. Tradit. Knowl.* 10(3): 538–540. Abstract: The work deals with 25 plant species, used traditionally by Bhil and Bhilala tribes of Jhabua district (Madhya Pradesh) for the treatment of various ailments. Some hitherto unexplored ethnomedicinal uses of plants have also been revealed.
1163. **Jain, A.K., Sharma, B.K., Bhat, Musadiq Hussain, Kumar, Amit & Fayaz, Mufida. 2016.** “Sixty five years of ethnobotanical studies in Madhya Pradesh, India– A review”. *Ethnobotany* 28: 105–122. Abstract: The present review covers the published work on ethnobotany of Madhya Pradesh between the period 1950–2015. Information was taken from various research papers published in various international and national journals, Ph.D. thesis, project reports, books, etc. During this period a large number of publications have been made on different aspects of ethnobotany of Madhya Pradesh. Papers have been published in more than 120 national and international journals. Work has been published on over 19 tribes. About 50% of the studies were made on ethnomedicine as the study object. Ethnomedicine for over 17 diseases appears in titles of papers. Present survey reveals that this scientific field has great potential for future progress. A total of 411 references including research papers, books, Ph.D. thesis and

research reports on ethnobotany, published during this period are given in the present paper.

1164. **Jain, J.B., Kumane, S.C. & Bhattacharya, S. 2006.** "Medicinal flora of Madhya Pradesh and Chhattisgarh– A review". *Indian J. Tradit. Knowl.* 5(2): 237–242. Abstract: Plants are natural industries, which provide high quality food and raw material for pharmaceutical, cosmetic and perfumery industries without causing environmental degradation. Medicinal plants as a group comprise approximately 8000 species and account for around 50% of all the higher flowering plant species of India. India possesses almost 8% of the estimated biodiversity of the world with around 0.126% million species. In India, Madhya Pradesh & Chattisgarh are known to harbour a rich wealth of medicinal plants. Studies have shown that these two states are pool of dozens of pharmaceutically important plants. Medicinal activity of few such plants has already been reported but a good number of plants still used by local folklore are yet to be explored. A detailed survey was carried out by the authors to collect information on both reported and unreported medicinal plants of this region. The present article represents statistical data of the medicinal plants of this region.
1165. **Jain, N. & Pachaya, J.S. 2015.** "Study on the phytotherapeutic uses of plants by the tribal people of Alirajpur district, M.P., India". *European J. Pharm. Med. Res.* 2(7): 236–240.
1166. **Jain, P. & Sahu, T.R. 1993.** "An ethnobotanical study of Noradehi Sanctuary Park of Madhya Pradesh, India: Native plant remedies for scorpion sting and snake bite". *J. Econ. Taxon. Bot.* 17: 315–328. Abstract: The paper reports the ethnobotanical uses of 45 species used by the tribals of Noradehi Sanctuary Park of Madhya Pradesh. The data has been gather from the tribal medicine men in different villages of the sanctuary. Based on the extensive medico-botanical exploration conducted in the area by the authors, total 45 species of vascular plants of medicinal importance under 39 genera and 28 families are enumerated. These species are arranged alphabetically along with their family, field number, local name, parts used and locality. A short description showing important identifying characters of a plant is also given. This is followed by the uses of the medicinal plants in the treatment of various disorders developing during scorpion sting and snake-bite. *Anogeissus latifolia*, *Azadirachta indica*, *Calotropis gigantean*, *Cyperus rotundus*, *Madhuca longifolia*, and *Tecoma grandis* are most important medicinal plant of this park, as they are useful against the disorders developed after both scorpion sting and snake bite. Amongst remaining 39 species, 33 are exclusively used againsy snake bite. Number of plant species used against scorpion sting is less i.e., only six, they are *Calotropis procera*, *Embllica officinalis*, *Euphorbia dracunculoides*, *E. Hirta*, *E. Nivulea* and *Ipomoea carnea*. Root is the most commonly used parts against these disorders. Of the five species, namely *Alysicarpus monilifer*, *Andrographis paniculata*,

*Bacopa monnieri*, *Bryonopsis laciniosa* and *Oxalis corniculata* whole plant is useful.

1167. **Jain, S.C. 2000.** The scope of medico-herbal industry in Madhya Pradesh for rural development. In: Rai, M.K., Verma, A. & Rajok, R.C. (Eds.), *Integrated Management of Plant Resources*. Scientific Publishers, Jodhpur. Pp. 127–132.
1168. **Jain, S.K. 1962.** "A preliminary study of the ethnobotanical some plants of Madhya Pradesh". *Proc. 49<sup>th</sup> Indian Sci. Congr.* 3: 345.
1169. **Jain, S.K. 1962.** "Studies in Indian Ethnobotany— Plants used in medicine by the tribals of Madhya Pradesh". *Bull. Reg. Res. Lab. Jammu* 1(2): 126 – 129.
1170. **Jain S.K. 1963.** "Studies in Indian ethnobotany— I. Less known uses of fifty common plants from tribals areas of Madhya Pradesh". *Bull. Bot. Surv. India* 5(3&4): 223–226. Abstract: A study of plants used by the aboriginal tribes in Madhya Pradesh revealed that several uses to which plants are put by these people are not known to outside community. The paper reports such less known uses for fifty plants. The plants are grouped in three categories— plants used for food, medicine and miscellaneous purposes. The local names of plants and the locality or source of information is given.
1171. **Jain S.K. 1963.** "Studies in Indian Ethnobotany— II: Plants used in medicine by the tribals of Madhya Pradesh. *Bull. Reg. Res. Lab. Jammu* 1(1&2): 126–128.
1172. **Jain, S.K. 1963.** "Studies in Indian ethnobotany; wild plant foods of the tribals of Madhya Pradesh of Madhya Pradesh". *Proc. Natl. Inst. Sci. India* 30B: 3.
1173. **Jain S.K. 1963.** "Magico religious beliefs about plants among the tribals of Bastar, Madhya Pradesh". *Quart. J. Myth. Soc.* 54: 73–94.
1174. **Jain, S.K. 1963.** "Observation on the ethnobotany of the tribals of Madhya Pradesh". *Vanyajati* 11(4): 177–183.
1175. **Jain, S.K. 1964.** "Medicinal plantlore of the tribals of Bastar". *Econ. Bot.* 19: 236–250.
1176. **Jain, S.K. 1964.** "Plant resources in tribal areas of Bastar". *Khadi Gramodyog* 10: 557–561 & *Vanyajati* 12: 174–178.
1177. **Jain, S.K. 1964.** "Wild food plants of tribals of Bastar (Madhya Pradesh)". *Proc. Natl. Inst. Sci. India*, Sec. B 30: 56–80.
1178. **Jain S.K. 1965.** "Medicinal plantlore of the tribes of Bastar". *Econ. Bot.* 19(3): 236–250. Abstract: The paper deals with the plants used by the tribals of Bastar (Madhya Pradesh, India) in the treatment of their ailments and injuries. The information is based on the observations and notes taken during five field trips to this district (1960-1963). The causes, diagnosis and treatment of disease are discussed. One hundred and one plants are dealt with; their botanical name, habit, local names and medicinal uses are given. The localities where the specimens or the information were gathered are mentioned. The data have been analyzed on the basis of the different ailments reported by the

informants, method of preparation and the parts employed in prescriptions. Stomach complaints, body pains, fevers, skin diseases, and cuts and wounds are common ailments. Pounding the plant parts into a paste or making decoctions in water are the usual methods of preparation. Most of the prescriptions involve only one plant species. Leaves and roots are the most commonly used plant parts. About 90 medicinal uses of plants reported do not seem to have been known (or at least properly known) earlier and may provide materials to pharmacologists for further tests.

1179. **Jain, S.K. 1965.** "Wooden musical instruments of the Gond of Central India". *Ethnomusicology* 9(1): 39–42.
1180. **Jain S.K.1975.** "Ethnobotany of central India tribals". *J. Indian. Bot. Soc. Abstract* 1(6): 63.
1181. **Jain S.K.1981.** Observations on ethnobotany of the tribals of Central India. In: Jain, S.K. (Ed.), *Glimpses of Indian Ethnobotany*. Oxford & IBH, New Delhi. Pp. 193–198.
1182. **Jain S.K.1987.** "Plants in Indian medicine and folklore associated with healing of bones". *Indian J. Orthopaed.* 1: 95–104.
1183. **Jain S.K.1991.** Observations on ethnobotany of the Tribals of central India. In: Jain, S.K. (Ed.), *Glimpses to Indian Ethnobotany*. Oxford & IBH, New Delhi, Jodhpur. Pp. 192–198.
1184. **Jain S.K.1997.** Observations on ethnobotany of the Tribals of central India. In: Jain, S.K. (Ed.), *Contribution to Indian Ethnobotany*. Scientific Publishers, Jodhpur. Pp. 61–65.
1185. **Jain, S.K. & Sinha, S.C. 1994.** Ethno-medicobotanical survey of Ambikapur, Madhya Pradesh. Fourth Int. Congr. Ethnobiol., Lucknow, India.
1186. **Jain S.K. & Tarafdar, C.R. 1963.** "Native plant remedies for snakebite among the adivasis of central India". *Indian Med. J.* 57(12): 307–309.
1187. **Jain, S.K., Hanif, M.I. & Tarafder, C.R. 1973.** "*Bauhinia vahlii* – A multipurpose plant in tribal area". *Vanyajati* 21(4): 106–108.
1188. **Jain, S.K., Shrivastava, S. & Kumar, V. 2000.** "Some observations of the life support species in Surguja forest of Central India: A report". *MFP News* 10: 8.
1189. **Jain, S.P. 2004.** "Ethno-medico-botanical survey of Dhar district, Madhya Pradesh". *J. Non-Timber Forest Prod.* 11(2): 152–157. Abstract: The paper deals with 31 wild species of medicinal plants belonging to 31 genera and 24 families. These are commonly used for treating various diseases by the Bhil and Bhila tribes of Dhar district. The results are based on ethno-botanical survey carried out during 1998-2000.
1190. **Jain, S.P. & Singh, J. 2010.** "Traditional medicinal practices among the tribal people of Raigarh (Chhatisgarh), India". *Indian J. Nat. Prod. & Resources* 1(1): 109–115. Abstract: The ethno-medico-botanical studies have been carried out in different tribal pockets of Raigarh district of Chhatisgarh State. This has led to the documenting of uses of 35



plant species in various diseases ranging from liver disorders to simple application for body pain. The findings reported may form the basis for bioprospection and consequently development of scientifically validated new and novel drugs for diseases like hepatitis, cancer, malaria, rheumatism and other various infectious diseases, where no satisfactory cure is available.

1191. **Jain, S.P. & Singh, S.C. 1997.** An ethno-medico-botanical survey of Ambikapur district, M.P. In: Jain, S.K. (Ed.), *Contribution to the Indian Ethnobotany* (3rd Ed.). Scientific Publishers, Jodhpur. Pp. 83–91.
1192. **Jain, S.P., Mishra, N.P., Singh, J. & Kumari, B. 2008.** "Traditional phytotherapy for diarrhoea, dysentery and liver disorders in Chhattisgarh state". *J. Econ. Taxon. Bot.* 32(Suppl.): 277–281. Abstract: The Chhattisgarh state is predominantly inhabited by tribal populations. These tribals are heavily dependent on forest wealth for meeting their daily requirements including medicines. Diarrhoea, dysentery and liver disorders are most prevalent water born diseases amongst the tribal populations and, therefore, mortality rate of children and adolescent are very high in these areas. For treatment of such diseases, the tribals use a number of plant drugs. In the present study, the ethno-medico-botanical uses of 45 plants in the treatment of diarrhoea, dysentery and liver disorders have been collected from various published sources and authors own survey in the tribal areas of Chhattisgarh.
1193. **Jain, S.P., Singh, S.C., Singh, J. & Kumar, S. 2003.** "Ethno-medico-botanical survey of Raipur district, Chhattisgarh state". *J. Econ. Taxon. Bot.* 27(2): 266–271. Abstract: An account on the medicinal uses of 39 plants by the tribals of Raipur district has been presented in this paper.
1194. **Jain, S.P., Srivastava, S., Singh, J. & Singh, S.C. 2011.** "Traditional phytotherapy of Balaghat district, Madhya Pradesh, India". *Indian J. Tradit. Knowl.* 10(2): 334–338. Abstract: Madhya Pradesh, the largest state of India, is the home of many tribals and harbour a number of plants species in their forest areas. Nearly one fourth of the total population of the state is inhabited by tribals such as Baigas, Gond, Korku, etc. tribes. An ethno-medico-botanical survey among different tribal pockets of Balaghat district, viz. Gangulapara, Lamta, Laugur, Langi, Baihar, Bithali, Lalbarra, etc. was carried out during the year 2007-2008 and folklore information was collected on 50 medicinal plants species belonging to 50 genera and 31 families with the help of tribal medicine men. Out of 50 plants, 15 predominant plants used in refractory diseases such as cancer, malaria, rheumatism, liver disorders and respiratory diseases, etc. These uses are not reported in earlier published literatures.
1195. **Jain, S.P., Gupta, N., Singh, J., Kumar, B., Prakash, A. & Singh, S.C. 2012.** "Ethno-medico-botanical survey of Seoni district, M.P.". *J. Econ. Taxon. Bot.* 36(4): 744–751.

Abstract: In the present work extensive ethno-medico-botanical survey of various tribal pockets of Seoni district has been undertaken during 2008-2010 and traditional phytotherapy used by tribals for managements and treatments of diseases and ailments with mode of administration and dosage etc. have been provided. The present study reveals that 54 medicinal plants species are invariably used in management and treatment of about 40 diseases and ailments by Korku, Gond, Saharia, Bheria etc. tribal communities of Seoni district.

1196. **Jain, S.P., Singh, S.C., Srivastava, S., Singh, J., Mishra, N.P. & Prakash, A. 2010.** "Hitherto unreported ethnomedicinal uses of plants of Betul district of Madhya Pradesh". *Indian J. Tradit. Knowl.* 9(3): 522–525. Abstract: The Betul district of Madhya Pradesh is appreciably inhabited by tribal population (ca 37%). Even today, the large segments of the tribal populations are dependent upon plant resources for treatment of various diseases and ailments. The paper deals with ethnomedicinal uses of 31 plants. Interestingly, most of the uses are first hand information, which may serve as resource material for development of new bio-actives and traditional preparations for cure or management of quite prevalent diseases like rheumatism, diabetes, cancer, skin diseases, etc.
1197. **Jaiswal, P. & Jain, B. 2017.** "A review on ethnomedicinal plants of Nimar area in Madhya Pradesh". *Int. J. Pharmacogn. & Phytochem. Res.* 9(7): 1017–1020. Abstract: Medicinal plants are a boon for disease. Nature has provided a rich botanical wealth with diverse plantation in different parts of India. Medicinal plants are useful for human ailments because of the presence of bioactive constituents or phytochemicals which are secondary metabolites such as alkaloids, saponin, glycosides, lactones, steroids etc. Due to the rapid extension of side effects of allopathic medicines, Herbal medicines are becoming popular day by day as Herbal drugs are safe, cheaper and easily available with therapeutic properties. In Nimar region of Madhya Pradesh, lots of common medicinal plants are available that are used by Nimari people and tribes as remedy to cure diseases. Nimar is the south western region of Madhya Pradesh state in west central India. The present paper provides information on 52 medicinal plants of Nimar area.
1198. **Jatav, R., Krishna, V.K. & Mehta, R. 2014.** "Ethnoveterinary use of some medicinal plants of Shivpuri district (M.P.), India". *Golden Res. Thoughts* 4(6): 1–5.
1199. **Jatav, R., Upadhyay, R. & Mehta, R. 2011.** "Ethnomedicinal plants used as antipyretic agents among the Sahariya tribes of Shivpuri (M.P.)". *Life Sci. Bull.* 8(2): 309–311. Abstract: An ethno-medicinal survey of different villages of Shivpuri district of M.P. was conducted between July, 2009 to June, 2010. Results of this survey indicated that the 20 plant species are used for the treatment of different type of fevers, prevalent among the tribes. In the present paper the information related to the botanical names with local names and parts of plant used and methods used in fever has been discussed.

1200. **Jitin, R., Singh, S.P. & Naz, A. 2013.** "An ethnomedicinal survey of Orchha Wildlife Sanctuary region of Tikamgarh district, Madhya Pradesh, India". *J. Bot. Res.* 4(1): 31–34.
1201. **Joshi, Bhavana, Tiwari, Arjun Prasad & Sikarwar, R.L.S. 2013.** "Poisonous plants with medicinal values from Bilaspur District, Chhattisgarh". *Bionature* 33(2): 37–43.
1202. **Joshi, P. 1981.** The Forest Herbal Resources and Bhil Medicines. In: Vyas, N.N. (Ed.) *Social Forestry in Tribal Development*, Tribe (Spl. No.) 13(2–4): 129 – 136.
1203. **Joshi, P. 1982.** "An ethnobotanical study of Bhils – A preliminary survey". *J. Econ. Taxon. Bot.* 3(1): 257 – 268.
1204. **Joshi, V. & Malviya, J. 2012.** "Radical scavenging activities of some ethno-medicinal plants in south western Madhya Pradesh". *Bull. Environm. Pharmacol. & Life Sci.* 1(4): 5–8. Abstract: The present study aims to investigate the free radical scavenging activities of some of the commonly used medicinal plants in southwestern Madhya Pradesh. The following plants were selected for investigation: *C. papaya*, *P. guajava*, *V. amygdalina*, and *M. indica*. The decoctions of the leaves of *C. papaya*, *P. guajava*, *V. amygdalina* and a decoction of the stem bark of *M. indica* are commonly used in the traditional treatment of malaria in southwestern Madhya Pradesh Tribals or ethnomedicinal men. Extracts from *C. papaya*, *M. Indica*, *V. amygdalina* and *P. guajava* showed varying antioxidant (free radical scavenging) activities when compared to vitamin C in the following order: *V. amygdalina* < *C. papaya* < *M. indica* < Vitamin C < *P. guajava*. The results suggest that the antioxidant activity of these plants may contribute to their claimed antimalarial property which can counter act the oxidative damage induced by the malaria parasite. This may be one of their modes of action in malaria therapy.
1205. **Judah, S.D. & Oommachan, M. 1994.** "Studies in the plants related to socio-religious ceremonies in the rural and tribal area of Jabalpur, Mandla district". *J. Appl. Pure Biol.* 9(1): 1–5.
1206. **Kadel, C. 2007.** *Ethnobotanical studies on tribal communities of Jhabua district (M.P.)*. Ph.D. Thesis, Jiwaji University, Gwalior, M.P. (Unpublished).
1207. **Kadel, C. & Jain, A.K. 2006.** "Plants used in ethnoveterinary practices in Jhabua district, Madhya Pradesh". *Ethnobotany* 18: 149–152. Abstract: Total communities of Jhabua use commonly available plants in 20 types of veterinary diseases that are common among the cattle, pets and birds.
1208. **Kadel, C. & Jain, A.K. 2007.** Some ethno-medicinal plants used by tribals communities of Jhabua district, M.P. for the treatment of malarial fever. In: Shukla, P.K. & Chaubey, O.P. (Eds.), *Threatened Wild Medicinal Plants: Assessment, Conservation and Management*. Anmol Publ., New Delhi. Pp. 187–190.
1209. **Kadel, C. & Jain, A.K. 2008.** "Folklore claims on snakebite among some tribal communities

of central India". *Indian J. Tradit. Knowl.* 7(2): 296–299. Abstract: Four regions of Madhya Pradesh and Chhattisgarh, Jhabua, Gwalior, Pachmarhi and Bastar were selected for observing folklore claims on some plant species used for the treatment of snakebite. Various plant parts are being used in different ways; some species are either used or not used in treatment of snakebite. To ascertain credibility of folklore claims, a comparison on use and disuse has been made.

1210. **Kala, C.P. 2009.** "Aboriginal uses and management of ethnobotanical species in deciduous forests of Chhattisgarh state in India". *J. Ethnobiol. & Ethnomed.* 5: 1–12. Abstract: A study on the native uses of ethnobotanical species was carried out in the south Surguja district of Chhattisgarh state in India with the major objective of identifying different food and medicinal plant species and also to understand their on going management and conservation. Through questionnaire and personal interviews, a total of 73 ethnobotanical species used by tribal and non-tribal communities were documented, of these 36 species were used in curing different types of diseases and 22 were used as edible food plants. This rich traditional knowledge of local people has an immense potential for pharmacological studies. The outside forces, at present, were mainly blamed to change the traditional system of harvesting and management of ethnobotanical species. The destructive harvesting practices have damaged the existing populations of many ethnobotanical species viz., *Asparagus racemosus*, *Dioscorea bulbifera*, *Boswellia serrata*, *Buchnania lanzan*, *Sterculia urens* and *Anogeissus latifolia*. The sustainable harvesting and management issues of ethnobotanical species are discussed in view of their conservation and management.
1211. **Kala, C.P. 2011.** "Traditional ecological knowledge, sacred groves and conservation of biodiversity in the Pachmarhi Reserve of India". *J. Environmental Protection* 2: 967–973. Abstract: The sacred groves in the Pachmarhi Biosphere Reserve (PBR) of India were studied to understand the concept of traditional ecological and biodiversity conservation systems. A questionnaire survey was conducted in the selected villages of the PBR along with the survey of sacred groves. In 10 selected villages of the PBR 7 sacred groves were managed by Mawasi and 16 sacred groves by Gond tribal communities. Different deities were worshipped in the sacred groves and each grove was named after the deity dwelling in the respective sacred grove. A total of 19 such deities were recorded during the survey worshipped by the local people. In study area, various traditional customs associated with sacred groves were in practice. The sacred groves were rich in plant genetic diversity and were composed of many ethnobotanically useful species, including wild edible fruits, medicinal plants, fodder, fuelwood and timber yielding species. Given the importance of conservation of biodiversity and ecosystem attempts should be made to maintain the sanctity of sacred groves.
1212. **Kala, C.P. 2013.** "Harvesting and supply chain analysis of ethnobotanical species in the

Pachmarhi Biosphere Reserve of India". *Amer. J. Environmental Protection* 1: 20–27. Abstract: Realizing the historical importance of central Indian forests in terms of ecological, social and economical perspectives and the present socio-economic changes in the community due to several reasons, the present study was conducted. It aimed at addressing the status of harvesting pattern and supply chain structure of various ethno-botanical species by the tribal communities in the Pachmarhi Biosphere Reserve of India. The questionnaire surveys were conducted in the villages of buffer zone areas of the Pachmarhi Biosphere Reserve and market places for studying the trends and status of collection, seasons of collection, prices, and supply chain of ethnobotanicals. A total 14 ethno-botanical species were found in active trade, and in majority of cases their gum, fruit and seed were collected. The gum yielding species such as *Acacia nilotica*, *Anogeissus latifolia*, *Sterculia urens*, *Terminalia tomentosa* and *Terminalia arjuna* were found to be highly paid species among all traded ethno-botanical species. The trade in ethnobotanicals and market trends seemed quite lucrative to the tribal communities and hence they have started unsustainable harvesting of tradable forest resources to get maximum returns unlike their ancestors. Of the total tradable ethnobotanical species 8 species have qualified to various threat categories of IUCN Red List. The results of this study are further discussed in view of the conservation and management of ethnobotanical species.

1213. **Kanungo, N. & Ahirwar, Ramesh Kumar. 2018.** "Indigenous medicinal plants used by tribal communities of district Anuppur, Madhya Pradesh". *Int. J. Life Sci.* 6(1): 209–212. Abstract: Present paper deals with 30 ethnobotanical plants have been identified for the treatment of various diseases. Herbarium has been prepared which contains information pertaining to botanical name, local name, plants used, their dose and process of administration.
1214. **Kapadia, R., Dwivedi, S., Dwivedi, A., Pandey, S. & Barpete, P.K. 2009.** "Polyherbal formulation used in the treatment of jaundice". *Ethnobot. Leaflet*. 13: 73–76. Abstract: Plants have traditionally served as man's most important weapon against pathogens. Herbal medicines are widely used by all sections of the community, either as folk remedies or as medicaments in the indigenous as well as modern system of medicine. The present work was performed to enumerate the medicinal herbs that tribes and rural people uses for the treatment of jaundice. The present investigation has been carried out in 32 remote places of Madhya Pradesh scattered over three regions (Malwa region, Nimar region and Vindhya region). Data were collected by interviewing local traditional therapists and tribes of the region. Details of 10 herbs and 03 formulations were gathered along with their doses, duration and formulations during the course of present investigation in the study area. Our study revealed that all above herbs and their formulations have been used since quite a long time by the tribes and rural people and no side/ adverse

effects were reported.

1215. **Kapale, R. 2012.** "Ethnomedicinal plants used by Baiga tribals in Amarkantak Meikal forest of Madhya Pradesh (India)". *Bull. Envir. Pharmacol. & Life Sci.* 1(4): 14–15. Abstract: Several ethnomedicinal surveys were carried out in Baiga tribals villages of M.P and C.G on various aspect of tribal people. The popular deals with ethnomedicinal plants which are commonly used by tribal people of Meikal hill region of Amarkantak. The botanical, local and family names of these plants along with the parts used and mode of administration are enumerated. The Baiga tribes of Madhya Pradesh is known for its unique social, cultural and traditional aspects. Baiga villages mainly found in natural places and Baiga people also called "son of Nature" The present paper aims to documented ethnomedicinal plant mainly used by Baiga people for their disease and other disorder.
1216. **Kapale, R. 2012.** "Ethnobotany of Baiga tribals with references to utilization of forest resources in Amarkantak Biosphere Reserve (India)". *Bull. Envir. Pharmacol. & Life Sci.* 1(6): 73–76. Abstract: Present study was carried out in various Baiga villages of Amarkantak Biosphere Reserve of India during October 2010 to April 2011. A survey was undertaken to collect information from Baiga people on the use and management of natural resources. The indigenous knowledge of local traditional healers and the natural resources used for various purposes were collected through questionnaire and personal interviews during field trips.
1217. **Kapale, R. & Ahirwar, R.K. 2013.** "Traditional uses of some plants used by tribals of Amarkantak-Achanakmar Biosphere, Central India". *Archives of Pharmacy & Biol. Sci.* 1(3): 80–84.
1218. **Kapale, R., Prajapati, A.K. & Ahirwar, R.K. 2013.** "Some diabetic plants found in natural forest of Anuppur district of Madhya Pradesh, India". *Int. J. Pharma. & Integrated Life Sci.* 2(1): 14–21. Abstract: More than 80% of the world's population uses natural medicines and depends on medicinal plants for health care. Rural communities in general and the Baiga tribe in particular of Amarkantak depend on plant resources and claim that their medicine is cheaper and more effective than modern medicine. The use of forest products for food and medicine is an ancient global tradition that fulfills the basic needs of human survival. The reports on the use of plants in traditional healing by the tribes, the survey made by interview, discussion, personal contacts and keen observations The Present study deals with the state of Madhya Pradesh in Anuppur District Indigenous Plant therapy upon Diabetes is well informed. Today in India, Diabetes has been concerned as a disease of common People. In this paper the same has been reported in relation to oral administration lead on 118 plants species.
1219. **Kapale, R., Prajapati, A.K., Nait, R.S. & Ahirwar, Ramesh Kumar. 2013.** "Traditional food plants of Baiga tribals; A Survey study in tribal villages of Amarkantak-Achanakmar

- Biosphere, Central India". *Int. J. Sci. & Tech.* 1(2): 27–30. Abstract: Amarkantak meikal forest area is mainly dominated by baiga tribals. Baiga tribe of India is a primitive tribe. Baiga people lives in natural places of meikal hills and depend on forest and forest plants for their livelihood. The present paper aim to document their wild food plant and its collection practices. The documented plant tabulated in this paper as per their local name, scientific name, growing season and parts of uses.
1220. **Karnik, C.R. 1966.** "Some medicinal plants from Satpura Mountains". *Indian Forester* 92: 173–183. Abstract: The present paper records fifty species of medicinal plants from hilly tracts of Satpura Mountains. The exact locations of these species are mentioned. The distribution of the different medicinal species in the area has also been given. The flowering and fruiting periods of different species throughout the year and their abundance are recorded.
1221. **Katiyar, P. & Kolhe, S.S. 2000.** "Medicinal weeds of Raipur region in Chhattisgarh plains". *J. Med. Arom. Pl. Sci.* (22/4A & 23/1A): 455–460.
1222. **Kaufmann, W. 1961.** "The musical instruments of the Hill Maria, Jhoria and Bastar Mauria Gondtribes". *Ethnomusicology* 5: 1–9.
1223. **Khan, A.A. & Khan, I.M. 1997.** "Observation on certain plants used in various diseases by the tribals of Shahdol district". *Pl. Sci.* 9(11) (Suppl.): 39–43.
1224. **Khan, A.A. & Khan, S. 2004.** "Ethnobotanical significance of wild poisonous plants of Amarkantak, district Shahdol, Madhya Pradesh, India". *Advances Pl. Sci.* 17(II): 435–438. Abstract: Amarkantak area is hilly and inhabited by tribal sects and other economically backward classes of people. During the survey 29 species of angiospermic poisonous plants has been enumerated. The botanical name followed by local names and parts used are furnished.
1225. **Khan, A.A., Khan, S. & Singh, M.P. 2003.** "Weeds of Soyabean [*Glycine max* (L.) Merrill] and their medicinal importance in Rewa division, Madhya Pradesh". *J. Econ. Taxon. Bot.* 27(1): 245–248. Abstract: A field observation was conducted in clay soil of Rewa division (M.P.) during rainy season of 1999-2000. The weeds are a serious problem in agriculture. The weed crop competition has been a limiting factor in the growth and yield of soyabean and the amount of potential loss occurring on account of weed is virtually unknown. In this paper the author presents the 22 medicinally important weed species of soyabean with details of family, vernacular names and medicinal utility.
1226. **Khan, A.A., Khan, S. & Singh, M.P. 2004.** "Weeds of Soyabean [*Glycine max* (L.) Merrill] and their medicinal importance in Rewa division, Madhya Pradesh, India". *Advances Pl. Sci.* 17(I): 67–69. Abstract: A field observation was conducted for weeds of Soyabean (*Glycine max* L.) in clay soil of Rewa division, Madhya Pradesh, during rainy season of 1999-2000. The weed limits the growth and yield of soyabean while

the potential crop loss on account of weed is unknown. In this paper, the authors present the medicinal importance of 22 weed species of soyabean.

1227. **Khan, A.A., Singh, Pragyan & Pandey, Rajshree 2005.** "Herbal treatment curing children disease among tribals of Shahdol district (M.P.) India". *Pl. Archives* 5(1): 159–163.
1228. **Khan, A.A., Shukla, K.M.L. & Khan, I.M. 2000.** "Enumeration of wild food plants of ethnobotanical significance in central India". *Advances Pl. Sci.* 13(I): 277–281. Abstract: The tribal sects of central India use under normal monsoon conditions, more or less the same food grains as that of civilised people of the society. The food grains include *Avena sativa*, *Vicia sativa*, etc. However, during the time of scarcity and famine they utilize other wild plants. During the survey an attempt has been made to collect and record the folklores pertaining to the food utility of 58 plant species belonging to 49 genera and 34 families of angiosperms. The botanical name followed by local names and along with parts used are furnished.
1229. **Khan, A.A., Singh, M.P. & Khan, S. 2002.** "Nature conservation in tribal magico-religious beliefs and taboos in district Shahdol, Madhya Pradesh, India". *Advances Pl. Sci.* 15(II): 429–431. Abstract: Tribal folklore are rich in magico-religious beliefs and taboos. They believe that some Gods and deities reside in forests. If they do not show mark of respect to them their full clan will be destroyed. So they conserve some species due to the beliefs attached resulting in some patches of forests being conserved. The article presents some traditional beliefs and taboos of the tribals of Madhya Pradesh fascinating nature conservation.
1230. **Khan, A.A., Verma, A.K. & Singh, M.P. 2003.** "Certain ethnobotanical informations on food and medicinal plants from Rewa Division of Madhya Pradesh with special reference to rare and endangered species". *J. Econ. Taxon. Bot.* 27(2): 249–254. Abstract: A survey of Rewa division was made to enumerate the food and medicinal plants. It is observed that tribals still preserve their unique tradition of using indigenous species for their day to day life. The paper recorded 50 species used by tribals and rural people. Out of these, 24 plants are consumed as food and vegetable and 27 species are used to cure the various human ailments. The present paper also highlights the mode of conservation of the rare and endangered species.
1231. **Khan, A.A., Agnihotri, Santosh Kumar, Singh, Manoj Kumar & Ahirwar, Ramesh Kumar 2008.** "Observation of certain plants used in skin diseases by Baiga tribe of Mandla district". *Pl. Archives* 8(1): 283–284. Abstract: The present paper deals with uses of certain angiospermic plants by Baiga tribes of Mandla district for skin diseases. Baiga uses different parts of the plants for medicine. Even for one disease they use different plants and also one particular species of the plant used for different disease. The tribals of this area have found that different parts of the plants can be used as



- remedy for skin disease. During present investigation 17 angiospermic plants are enumerated with their family, vernacular name, application and mode of administration.
1232. **Khan, M.A. & Ahmad, Z. 1993.** "Ethnobotanical studies of certain rare medicinal plants of Bhopal". *Fitoterapia* 64(6): 516–517. Abstract: Plants having medicinal utility have been collected from Bhopal and its suburbs. During the collection, an attempt has been made to record the folklores pertaining to the medicinal utility of the plants. In the present paper eight plants have been dealt with, out of which 6 are new records from Bhopal, *Belamcanda chinensis* DC., *Caesalpinia cristata* L., *Calliandra haematocephala* Hassk., *Leucaena leucocephala* (Lam.) de Wit, *Pterocarpus marsupium* Roxb. and *Trigonella polycerrata* L.
1233. **Khan, M.A. & Singh, V.K. 1996.** "A folklore survey of some plants of Bhopal district forests, Madhya Pradesh, India, described as antidiabetics". *Fitoterapia* 67(5): 416–421. Abstract: In the course of ethnopharmacological surveys of Bhopal district forests in Central India, conducted between 1987-1990, 28 species of folk drugs plants (26 genera, 21 families) used as antidiabetics by the rural population and forest ethnic peoples ('Gond' tribals) have been identified. Information on mode of administration and dosage are given for each folk recipe.
1234. **Khan, M.A., Khan, T. & Ahmad, Z. 1994.** "Barks used as source of medicine in Madhya Pradesh, India". *Fitoterapia* 65(5): 444–446. Abstract:
1235. **Khan, S.S. 2015.** "Exotic arboreal plants of Bhopal, their therapeutic potential and conservation". *Indian J. Appl. Pure Biol.* 30(1): 89–95. Abstract: A survey of Bhopal was carried out to record the exotic plant species growing in various localities. It was found that several species are growing luxuriantly away from their native places or centres of origin. These include a number of weeds such as *Acanthospermum hispidum* DC., *Argemone mexicana* L., *Gomphrena celosioides* Mart., *Oxalis latifolia* H.B. & K. and *Parthenium hysterophorus* L. etc. The arboreal species include *Cananga odorata*, *Crescentia cujete*, *Melaleuca leucadendron*, *Grevillea robusta*, *Couroupita guianensis*, *Adansonia digitata* and scores of others. The present paper deals with the medicinal utility of certain exotic arboreal species, which have enriched the flora of Bhopal from aesthetic point of view also, because many of them are elegant and produce flush of beautiful blossoms. Almost all the species dealt with in the paper have been found to have various therapeutic utilities and therefore can be exploited after conserving the existing specimens in situ and systematic propagation by vegetative means, seed germination and plant tissue culture technique using various explants.
1236. **Khan, S.S. 2015.** "Exotic weeds of Bhopal and their medicinal utility". *Indian J. Appl. Pure Biol.* 30(2): 169–177. Abstract: Because of strategic location in the heart of the country, Bhopal is floristically rich and has more than 1000 species of flowering plants, predominantly angiosperms. Apart from indigenous species, there are exotic species

also, which have their nativity in far off countries in the world. Many of these species have been encountered and recorded by the botanists from various parts of the country and their description can be witnessed in standard floras, published mostly in the late 19th century or early 20th century. Oommachan<sup>15</sup> in his flora of Bhopal has given a list of 24 exotic weeds which more or less have become naturalised in the ambience of Bhopal and its suburbs. Out of these species 11 medicinally important species have been mentioned in the present paper.

1237. **Khan, S.S. & Chaghtai, S.A. 1979.** "Euphorbias of Bhopal and their medicinal utility". *Chikitsa* 1(1): 75–76.
1238. **Khan, S.S., Chaghtai, S.A. & Oommachan, M. 1982.** "Ethnobotanical studies of certain rare medicinal plants of Bhopal". *J. Scient. Res.* 4(3): 185–187.
1239. **Khan, S.S., Chaghtai, S.A. & Oommachan, M. 1984.** "Medicinal plants of Rubiaceae of Bhopal: An ethnobotanical study". *J. Scient. Res.* 6(1): 37–39.
1240. **Khandelwal, A.K., Ganguly, S., Bajaj, A. & Khan, S. 2012.** "New records, ethnopharmacological applications and indigenous uses of *Gloriosa superba* (Glory lily) practices by tribes of Panchmarhi Biosphere Reserve, Madhya Pradesh, central India". *Nature & Sci.* 10(5): 23–48.
1241. **Khanna, K.K. & Kumar, A. 2005.** "A contribution to the economic plants of Chhattisgarh, India". *J. Econ. Taxon. Bot.* 29(2): 461–469. Abstract: The paper deals with a comprehensive account of the economic plants of Chhattisgarh. The economic plants of the state have been broadly grouped under 28 categories including medicinal on the basis of usage of plants while the medicinal plants have been dealt under 49 sub-categories on the basis of ailments.
1242. **Khanna, K.K. & Kumar, A. 2009.** "Noteworthy ethnomedicinal uses of plants from the tribals of Betul district, Madhya Pradesh". *J. Econ. Taxon. Bot.* 33(4): 933–939. Abstract: The paper deals with ethnomedicinal uses of 72 plant species which have not been recorded so far in the earlier literature. The ethnomedicinal information was collected from Gond, Korku and Gaiki tribes of the Betul district. The plant species mentioned in the paper are used to cure various ailments, viz. Asthma, conjunctivitis, diabetes, diarrhoea, dysentery, elephantiasis, eczema, fever, gastro-enteritis, hypertension, headache, impotency, insanity, itching, kidney stones, leprosy, leucoderma, lumbago, liver disorders, mouth sores, paralysis, piles, rheumatism, skin eruptions, toothache, wounds, worms and spermatorrhoea. Botanical name and vernacular name/s (wherever available), family name, uses and locality along with field number have been provided.
1243. **Khare, B. 2017** "A preliminary ethnobotanical survey of Sehore district of Madhya Pradesh". *Int. J. Res. – Granthaalayah* 5(6): 58–62. Abstract: The present communication deals with the ethnobotanical study of Sehore. Sehore district with an area of 6579 km<sup>2</sup>

lying between the North Latitudes 22°33'30" & 22°40'25" and East longitudes 78°26'00" and 78°02'00". The normal rainfall of district is 1217.7 mm. The study revealed with 41 taxa belonging to 40 genera and 30 angiospermic families that are used by the tribal people to cure various human diseases.

1244. **Khare, P.K. & Khare, L.J. 1999.** "Plants used in rheumatism by the rural people of Chhatarpur district, Madhya Pradesh, India". *J. Econ. Taxon. Bot.* 23(2): 301–304. Abstract: The present work deals with the study of 21 medicinal plants used in rheumatism by rural peoples of Chhatarpur district. The information about their local name, plant parts used and form their application in this specific disease has been compiled.
1245. **Khare, P.K. & Choubey, V.B. 2010.** "Some poisonous and medicinal plants of Sagar in central India". *J. Non-Timber Forest Prod.* 17(3): 357–360. Abstract: A preliminarily survey was conducted for poisonous and medicinal plants in tropical dry deciduous forests of Sagar district and its environ in central India. A total number of 15 species were collected belonging to 13 families are reported here. Out of these 2 herbaceous, 3 shrub and 10 tree species were classified. These plants are used traditionally medicines in many diseases, however in large doses may be harmful and show poisonous activity. These plants species are known for their different poisonous properties like asphyxiation, cardiac, blood, brain and irritant poisoning etc. Chemical constituents, plant habit, family, toxic parts, local name, flowering season, toxicity and medicinal uses have been described and discussed.
1246. **Kiruba, S., Dhruw, S.S.K., Sahu, P.K., Geetha, V.S. & Jeeva, S. 2014.** "Phytotherapeutic drugs used by the tribal folk of Achanakmar Amarkantak, Biosphere Reserve, Central India". *Int. J. Pharma Res. Health Sci.* 2(2): 157–165. Abstract: The Ethnomedicinal information of Baiga tribes of Achanakmar Amarkantak Biosphere Reserve (AABR), Bilaspur, Madhya Pradesh and Chhattisgarh, India was collected through interviews and discussion regarding the plant prescribed, such as part of the plant used, medicinal uses, detailed information about mode of preparation, form of usage and method of application. A total of 39 species belonging to 35 genera and 31 families to treat various ailments. The documented medicinal plants were mostly used to cure cold, cough, diabetes, dysentery and skin diseases, etc. According to the informants the indigenous knowledge is drastically disappearing, the younger generations are not interested to practice traditional medicine due to the changes in life style and the intervention of modern medicine. Hence the documentation of traditional knowledge among the ethnic people is essential to the betterment of our future generation, since most of the lives saving medicines are derived based on ethnic wisdom of this traditional community those who directly depend on plants for their survival.
1247. **Kishore, K. & Roy, Deepshikha. 2011.** "*Tephrosia purpurea* Pers. (Fabaceae)— A common winter weed of Chhatisgarh, India— As a source of anticancer drug". *Indian J. Appl. Pure*

- Biol.* 26(1): 53–55. Abstract: *Tephrosia purpurea* Pers. of Fabaceae has been found to have  $\beta$ -sitosterol which has anticarcinogenic activity. In combination with similar phytosterols, it reduces blood levels of cholesterol, and is sometimes used in treating hypercholesterolemia.
1248. **Koli, M.C., Shrivastava, S., Mishra, P.K., Shrivastava, A., Saxena, R. & Saxena, R.C. 2002.** “Report of some medicinal plants used in folk medicine in tribal areas of Lateri, distt. Vidisha, M.P.”. *Nature and Biosphere* 7(1&2): 42–48.
1249. **Kosalge, S.B. & Fursule, R.A. 2009.** “Investigation of ethnomedicinal claims of some plants used by tribals of Satpuda Hills in India”. *J. Ethnopharmacol.* 121(3): 456–461. Abstract: The tribals residing in Satpuda hills are illiterate, socio-economically backward and still depend on medicinal plants for healthcare and for treatment of various diseases. The objective of the present study was to investigate ethnomedicinal claims of some distinctive medicinal plants utilized by Pawara tribal in the Satpuda hills. Methodology used to investigate ethnomedicinal claims include seasonwise field visits, collection of information from tribal medicine men (Badwa), patients and elderly person in and around study area. Similar use of plants told by minimum three Badwas were taken into consideration and cross-checked with eight elderly persons having traditional knowledge of plants and two to five patients who received treatment from Badwa. Present investigation revealed that tribals are regularly using 52 species of plants belonging to 36 families to cure diseases like skin disorders, burn, diarrhea, jaundice, mouth ulcer, fever, joint pain, abdominal pain, migraine, menstrual problems, urinary problems, wounds, dog bite, as anthelmintic and abortifacient. The study revealed 14 new ethnomedicinal uses of plants not reported previously in the literature and could help to find out new lead compounds for welfare of mankind under present day patent regime. Medicinal plant knowledge gained from tribals would be very useful for pharmacognosists and pharmacologists.
1250. **Koushley, P.K., Singh, R. & Wasnik, A. 2014.** “Ethnobotanical study of bamboo in Balaghat district of Madhya Pradesh”. *Int. J. Advances Life Sci.* 7(3): 508–513. Abstract: The Bamboos play a very important role in rural as well as urban life in the country. India is second in bamboo diversity and production of the world. There are several uses of bamboos in human life. In the present study, so many types of traditional uses of bamboos and articles made from bamboo indigenously are recorded with photographed during a survey work in the Balaghat district of Madhya Pradesh during 2012 - 2013.
1251. **Kujur, Manoj & Ahirwar, Ramesh Kumar. 2015.** “Folklore claims on some ethno medicinal plants used by various tribes of district Jashpur, Chhattisgarh, India”. *Int. J. Curr. Microbiol. Appl. Sci.* 4(9): 860–867. Abstract: Present paper deals about some ethnomedicinal plants used by various tribal communities of district Jashpur, Chhattisgarh, India. A record on 34 plants species belonging to 22 families, used by tribes for curing

various ailments human being and animal are given, uses of plants for other purpose are also mentioned.

1252. **Kumar, A. 1996.** "Some ethnomedicinal plants of Murias of the Indravati Tiger Reserve, Bastar (Madhya Pradesh)". *J. Econ. Taxon. Bot., Addit. Ser.* 12: 201–205. Abstract: The present communication provides ethnomedicinal significance of 27 plant species used by the Muria tribe of the Indravati Tiger Reserve, Bastar, Madhya Pradesh.
1253. **Kumar, A. 2012.** "Ethnomedicinal investigations of some plants used by the tribals of Bori Wildlife Sanctuary in Hoshangabad district (MP)". *Ethnobotany* 24: 123–125. Abstract: The traditional usage of medicinal plants among tribals of Bori Wildlife Sanctuary in Hoshangabad district of Madhya Pradesh was studied. Altogether 23 species of ethnomedicinal plants were recorded among them, which are used in fever, chest pain, bone fracture, headache, vomiting, abortion, snake bite, ear pain, eye pain and ulcer. It is emphasized that all efforts should be made to conserve these plants scientifically for benefitting the healthcare of tribal community.
1254. **Kumar, A. & Khanna, K.K. 2000.** "Ethnomedicinal plants of Betul district, Madhya Pradesh". *Bull. Bot. Surv. India* 42(1-4): 109–114. Abstract: The paper deals with ethnomedicinal information 54 plant species (belonging to 33 families) collected from field survey amongst three tribes viz., Gond, Korcu and Gaiki of Betul district, Madhya Pradesh. An analysis of data has indicated that eight plant species are employed as antidote to snake bite and scorpion sting, six to treat fever, five for rheumatism, four to treat cold, cough, skin diseases, as anthelmintic and tonic, and three for stomach diseases while two species to treat impotency, cut, wounds and as diuretic. On the other hand, only a single species has been referred for a number of other ailments like eye diseases, spermatorrhoea, spleen enlargement, tuberculosis, mouth sore, boil, asthma, liver disorder, toothache, bone fracture, abortifacient, antifertility, and in veterinary. Further, a comparison with the concerned literature has revealed that 23 ethnomedicinal uses of plants have not been reported earlier.
1255. **Kumar, A. & Lal, J. 2003.** "Medicinal plant resources of the Kanha Tiger Reserve, Madhya Pradesh". *J. Econ. Taxon. Bot.* 27(2): 255–265. Abstract: The paper gives an account of 100 medicinal plants of the Kanha Tiger Reserve, Madhya Pradesh. Correct botanical name, family name, vernacular name/s (if any) and medicinal uses of plants have been provided.
1256. **Kumar, A. & Lal, J. 2003.** Medicinal plant resources of the Kanha Tiger Reserve, Madhya Pradesh. In: Singh, *et al.* (Eds.), *Ethnobotany and Medicinal Plants of India and Nepal*. Scientific Publishers, Jodhpur. Vol. I, pp. 255–265.
1257. **Kumar, A. & Yadav, D.K. 2010.** "Ethnomedicinal, mythological & socio-economical aspects of bamboos in Hoshangabad district (Madhya Pradesh)". *Ethnobotany* 22: 97–101. Abstract: An attempt has been made to explore ethnomedicinal as well as mythological,

socio-religious and socio-economical aspects of bamboos among the tribals of Hoshangabad district, which include the claims, beliefs and medicinal practices of the tribals pertaining to use of plant and plant products for the prevention and treatment of various ailments as well as their use in the socio-economic upliftment of different ethnic and handicraft making groups.

1258. **Kumar, Anil & Yadav, D.K. 2011.** "Ethno medicinal uses of obnoxious weeds from the tribal folklore of Pachmarhi Biosphere Reserve (Madhya Pradesh)". *Indian Forester* 137(7): 901–907. Abstract: Pachmarhi Biosphere Reserve is one of the richest biodiversity regions of Madhya Pradesh. Various weeds are abundant in the croplands as well as in the forests of this region. They frequently grow on wasteland, roadsides and croplands. Aborigines consider these plants as obnoxious weeds since these plants pose several problems in croplands and daily life. Several obnoxious weeds are highly efficacious as herbal remedies against some common ailments. In the present communication, ethno-medicinal uses along with indigenous formulations of 35 species of weeds are documented from different ethnic group of Pachmarhi Biosphere Reserve (Madhya Pradesh).
1259. **Kumar, B.A. 2015.** "Some ethno-medicinal plants and eco-friendly natural colours yielding flowering plants of B.S.N. Govt. P.G. College campus, Shajapur (M.P.)— A survey report". *Int. J. Res. – Granthaalayah* 3(4): 1–6. Abstract: The present work is attempt has been made to compile the some ethno-medicinal plants and eco-friendly natural colors yielding flowering plants their preparations used for cure of diseases and information of flowering plants with the list of plants from B.S.N. Govt. P.G. College campus Shajapur, India. The present study focused on some important plants having medicinal uses and color yielding potential. Now-a-days natural products and herbal medicines have been recommended for the treatment of various diseases. The present study of 15 ethno-medicinal plants and 10 natural colors yielding flowering plants is helpful for local peoples of Shajapur.
1260. **Kumar, G.S. & Ahirwar, Ramesh Kumar. 2018.** "Phyto-diversity of ethnomedicinal plants of Chanda forest range district Dindori, Madhya Pradesh". *Int. J. Life Sci.* 6(1): 213–216. Abstract: Present paper deals with 23 species of plants covering 23 genera and 19 families uses of various diseases by the tribals of Chanda, district Dindori, Madhya Pradesh. The plants are enumerated and arranged in an alphabetically order with botanical name followed by family, vernacular name, part(s) ethno-medicinal uses have been presented.
1261. **Kumar, R., Shrivastava, P.N. & Jain, Manju. 2015.** "Ethnobotanical study of traditional medicinal plants used by tribes of Guna district, Madhya Pradesh, India". *Int. J. Curr. Microbiol. Appl. Sci.* 4(7): 466–471. Abstract: Ethno-botanical study on traditional medicinal plants was conducted between 2011–2013 in Guna district of Madhya Pradesh, India and documented different types of traditional medicinal plants used by

the indigenous peoples. The study was focused on identifying medicinal plants, disease treated, part of the plant used, methods of preparation, route of administration, ingredients added etc. The data was collected using interview and questionnaires by selecting 16 healers using purposive sampling method. A total of 32 medicinal plant species were collected and identified from the study area for treating various human ailments. The paper enumerates these medicinal plant species belonging to 26 genera and 18 families.

1262. **Kumar, R., Suman, N.R. & Dash, S.S. 2004.** "Traditional uses of plants by tribals of Amarkantak region, Madhya Pradesh". *Indian J. Tradit. Knowl.* 3(4): 383–390. Abstract: The paper reports the traditional medicinal uses of 20 plants belonging to 16 families, for 24 different diseases and use of one plant for medico-religious belief by four different tribes of Amarkantak region of Madhya Pradesh. The paper also has taken into account the perception of the local people about the effectiveness of the plants for specific diseases for which they are prescribed.
1263. **Kumar, V. 1999.** "Some indigenous tools of Surguja district, Madhya Pradesh, India". *Ethnobotany* 11: 135–137. Abstract: Some indigenous tools used among the folk of Surguja district for various purposes are described in this paper.
1264. **Kumar, V. 2003.** "Wild edible plants of Surguja district of Chhattisgarh state, India)". *J. Econ. Taxon. Bot.* 27(2): 272–282. Abstract: Ethnobotanical study has been carried out in Surguja district of newly formed Chhattisgarh state. The paper deals with 116 species consumed as food by tribals and folks of Surguja apart from their seasonal crops and vegetables.
1265. **Kumar, V. & Jain, S.K. 1998.** "A contribution to ethnobotany of Surguja district in Madhya Pradesh, India". *Ethnobotany* 10: 89–96. Abstract: The paper reports the results of an ethnobotanical study conducted in Surguja district. The study has been carried out in North, East, manendragarh and Korias Forest Divisions of the district. Folk uses are described for 50 species, of which 9 are for food, 41 for medicine and 14 for miscellaneous uses such as oil, dye, fodder, etc. These species are used among Oraons, Gonds, Korwas, Kodakus, Majhwars, Panikas, Pandos and Cherwas of the region. About 30 uses reported here seem to be less known (Ambasta, 1986, Jain 1991) in India, or not recorded for this region. Some magico-religious beliefs about plants prevalent in the area have been mentioned for record.
1266. **Kumar, V. & Jain, S.K. 1999.** "Some less known ethnomedicines among the tribals of Surguja district in Madhya Pradesh". *J. Non-Timber Forest Prod.* 6(3/4): 110–113. Abstract: Surguja district in Madhya Pradesh is rich in plant wealth as also in tribal population, and hence is rich in ethnomedicine. The paper deals with less known uses of 20 plants, as practised in ethnomedicine by the tribals in Surguja. The plant part used, method of preparation and dosage are mentioned, wherever available. Comparison

with available literature on ethnobotany shows that these uses are new or less known outside Surguja, and need further scientific work for wider usage.

1267. **Kumar, V. & Jain, S.K. 2002.** "Plant products in some tribal markets of Central India". *Econ. Bot.* 56(3): 242–245.
1268. **Kumar, V. & Rao, R.R. 2002.** "*Elephantopus scaber* L. An important medicinal plant used by tribals of Surguja". *Trop. Med. Pl., Malaysia* 3(2): 219–221.
1269. **Kumar, V. & Rao, R.R. 2007.** "Some interesting indigenous beverages among the tribals of central India". *Indian J. Tradit. Knowl.* 6(1): 141–143. Abstract: Central India is rich in ethnic as well as floristic diversity. The tribal groups of this region mainly depend on the forests for food, medicine and shelter. Beverages play an important role in the life of these tribals. The paper presents the detailed account of two important beverages, Handia and Mahua consumed by the tribals of Central India.
1270. **Kumar, V. & Sikarwar, R.L.S. 2003.** "Plants used as fish poison by tribals of Surguja district in Chhattisgarh State, India". *Ethnobotany* 15: 87–89. Abstract: Surguja district of Chhattisgarh is mainly inhabited by different tribal communities whose main occupation is agriculture and collection of forest products. Fishing is an alternative occupation of the tribals and other folk of the area. They use their indigenous knowledge about plants for catching fish easily. The present paper deals with 14 species used by the tribals of Surguja district for stupefying fish. The use of three of these species, viz. *Ludwigia perennis*, *Miliusa tomentosa* and *Shorea robusta* as fish poison has not been reported so far in literature.
1271. **Kumar, V. & Sikarwar, R.L.S. 2004.** "Role of tribals in conservation of plant diversity in Central India". *Vanyajati* 52(2): 7–9.
1272. **Kumhar, I.P., Salim, M. & Prajapati, P. 2017.** "Enumeration of ethno-medicinal plants of Sidhi district (Madhya Pradesh)". *Int. J. Bot. Stud.* 2(1): 121–124. Abstract: The ethnomedicinal information of Sidhi is described. The plants used by the Rural and tribal people were listed in alphabetical orders by their botanical name together with family, local name and ailments. A total 90 species belonging to 45 families were documented.
1273. **Kurup, A.M. 1962.** "Glimpses of life and culture of the tribes of Madhya Pradesh". *Vanyajati* 10(4): 134–145.
1274. **Kurup, A.M. 1970.** "Tribal festivals of Central India". *Folklore* 11(5): 159–165.
1275. **Kushwah, G. 2009.** *Ethnomedicine and credibility of some folklore claims of Gwalior district*. Ph.D. Thesis, Jiwaji University, Gwalior (Unpublished).
1276. **Kushwaha, K., Tripathi, R.K. & Dwivdi, S.N. 2013.** "Medicinal plants used in the treatment of some common diseases by the tribal and rural people in Korea district of Chhattisgarh". *Int. J. Pharm. Life Sci.* 4(10): 3023–3027. Abstract: Numerous plants have been used for treating human diseases and disorders in our country since ancient times.



A few of them become more popular and widely accepted due to their favourable remedial properties and went into organised Indian system of medicines. Hundreds of ethnomedicinal plants have been subjected in India and abroad to modern laboratory experiments and clinical trials. Obviously, the results of such research work done during last few decades were reviewed by scientists. The present paper include the medicinal value of 64 plant species used in the treatment of various human ailments by the tribal and rural people of Korea district of Chhatisgarh.

1277. **Kusum, E.M., Tiwari, P., Pimapalgaonkar, R. & Prasad, H. 2016.** "Contribution of Oraon tribe of Jashpur district in the traditional preparation of medicines (Part-12)". *Indian J. Appl. Pure Biol.* 31(2): 230–235. Abstract: The application of plants for different medicinal uses evolved and maintained is determined by the locally available biodiversity both in the past and present. Jashpur district the present study area in Chhattisgarh state and is situated in the north-east part of the state is rich in biodiversity. Many of the plant species used in various medicinal formulations naturally exist here for long time. The major types of tribes found in the Jashpur region are Pahari korwa, Oraon/ Kurunkh, Kanwar, Birhor, Gond, Nagesia and Ganda. Oraon tribe is the major dominating population's amongst all the types found in Jashpur. In Jashpur the tribal's are 65.37% of the total populations. The total forest area in this region is 2752.28 sq km which constitutes 51.45% of the total area of the district. Tropical deciduous type of Sal forest is found in Jashpur. The diversity and richness of soil- microbes results in growth of various types of plants which is used by Oraon tribe for their health- care and livelihood security. The present study comprised an ethnobotanical survey among the Oraon tribe in Jashpur district for their documentation of herbal medicine. This paper deals with the herbal treatment for abdominal pain, piles, stomach disorders, tetanus and tingling.
1278. **Kutty, C.S. 2015.** "Ethnomedicinal plants used for treating scorpion sting and snake bite poison by the tribes of Rahatgaon, Harda". *Int. J. Ethnobiol. Ethnomed.* 1(1): 1–2. Abstract: The present study mainly focuses on the study of indigenous herbal remedies used for treating poison of scorpion sting and snake bite by tribal communities of Rahatgaon of District Harda, in Madhya Pradesh. The present study is based upon the ethno botanical studies on two tribal communities of Gond and Korku. Tribal healers utilize several local available plants in ethno-medicinal practices. Present paper reports the use of 23 species of plants used by the tribal communities remedy for animal poison.
1279. **Lahiri, Ranu. 2007.** "Ethnomedicinal survey of Sanjay National Park of district Sidhi, Madhya Pradesh, India". *Fl. & Fauna* 13(2): 289–299. Abstract: One hundred fifty four species of angiospermic as well as pteridophytic plants were collected from Sanjay National Park, district Sidhi, Madhya Pradesh. The common names and ethnomedicinal uses of these plants are given.
1280. **Lal, Brij. 1988a.** "Traditional remedies for bone fracture among the tribals of Madhya

- Pradesh, India". *Aryavaidyan* 1(3): 190–195.
1281. **Lal, Brij. 1988b.** "Ethnobotanical studies of the Baigas in Baigachak region in M.P.". *Bull. TDR* 16(1-2): 29–35.
1282. **Lal, Brij. 1993.** "Ethnobotany of Baigas of Madhya Pradesh- A preliminary survey". *Arunachal Forest News* 11(1): 17–20.
1283. **Lal, Brij & Dubey, V.P. 1992.** "A survey of the plant of ethnomedicine of Amarkantak plateau in Central India". *Agric. Biol. Res.* 89(1): 29–37.
1284. **Lal, Brij & Maheshwari, J.K. 1993.** "Prospects of plant-based cottage industries in tribal areas of Madhya Pradesh". *J. Econ. Taxon. Bot.* 17(1): 235–238. Abstract: Madhya Pradesh is the largest state in the Indian Union. It has the highest concentration of tribal population in the country. The state is dominated by many tribal communities namely Baiga, Bharia, Bhil, Gond, Kamar, Kol, Oran, etc. The forest plays a vital role in the economy of the tribals. The tribals are dependent on the forest for their day-to-day requirements. They collect minor forest product (MFP) like roots, tubers, fruits, flowers, fibre, dye, tannin, gum and resin, etc. During last one decade of extensive field studies, it has been observed that the tribals areas are extremely rich in raw material for the establishment of cottage industries, especially food processing, herbal drug collection and processing units, kattha, silk manufacturing units, distillaries, honey collection, gum and resin collection centres, etc. These will provide adequate employment to tribal people and improve their economy. The plant species which can play a vital role in the establishment of cottage industries are *Aegle marmelos* (L.) Corr., *Bauhinia vahlii* W. & Arn., *Boswellia serrata* Roxb., *Curcuma angustifolia* Roxb., *Dendrocalamus strictus* (L.) Nees, *Dioscorea* spp., *Embllica officinalis* Gaertn., *Lannea coromandelica* (Houtt.) Merr., *Madhuca longifolia* (Koen.) Macb. var. *latifolia* (Roxb.) Chev., *Shorea robusta* Gaertn.f., *Terminalia* spp., etc. such plant species can be systematically cultivated for adequate supply of raw material.
1285. **Lal, Brij, Upreti, D.K. & Kalakoti, B.S. 1985.** "Ethnobotanical utilization of Lichens by the tribals of Madhya Pradesh". *J. Econ Taxon. Bot.* 7(1): 203–204. Abstract: The present paper deals with the study of ethnobotanical importance and enumeration of six species of lichens used by the tribals in the different tribal pockets of Madhya Pradesh.
1286. **Lal, S. & Sahu, M.S. 2016.** "Ethnobotanical observations from Sitanadi Wildlife sanctuary, Dhamtari, Chhattisgarh, India". *Int. J. Pharm. Life Sci.* 7(9): 5224–5233. Abstract: Tribal belt of Dhamtari Chhattisgarh is dominant with medicinal plants by large numbers of tribal, rural and urban people. Several tribal communities like Kamar, Gond and Baigas inhabit in the area ethno botanical surveys had been carried out in forest patches of Sitanadi Wildlife sanctuary, Dhamtari district Chhattisgarh from 2014-2015. The paper reports were documented of ethno botanical uses of 64 plant species are described in which different parts of plants are used for different purposes for traditional medicine

by people etc. 30 herb, 20 trees, 12 shrub, 02 climbers are reported. Family wise distribution of medicinal plants shows Fabaceae is most dominant families with 5 species each and Apocynaceae was co-dominant family with 4 species. The drugs were found to be extracted from whole plant, root, rhizome, leaves, flower and seed of the plant. The aim of the present survey is to highlight that local people knowledge, role in resource management and focus on the diversity of ethnobotanical plants for future use and provide the framework to aware the people how to use plants to solve different type of problem.

1287. **Lal, S., Masih, V., Sahu, P.K. & Soni, I. 2015.** "Observation of traditional knowledge of tribe people of Gurur, district Balod, CG". *Int. J. Pharm. Life Sci.* 6(8-9): 4746–4750. Abstract: Ethno-botanical study on traditional medicinal plants was conducted in Gurur block of Balod district of Chattisgarh, India and documented different types of traditional medicinal plants used by the indigenous peoples. The study was focused on identifying medicinal plants with botanical name, family, local name, parts used, methods of preparation, administration and ailments treated are provided. Baiga, Gond and Oraon are common tribal communities of Balod district and completely or partially dependent on forest product for their survival and livelihood. The data was collected using interview and questionnaires by selecting 16 healers using purposive sampling method. A total number of 28 species of plants belonging to 25 genera and 18 families have been recorded in study area of Gurur, Balod. Total number of species, genera and families of both cultivated and wild category was studied. The present study highlights on traditional knowledge and ethno-medicinal observation in different areas of Gurur, district Balod, CG. The ethno medicinal information of tribal's peoples was collected from of the study sites and brief description of the plants will be discussed later.
1288. **Lale, S.K. & Gaur, S.K. 2017.** "Utilization of some important herbs used as 'Saka' (vegetable) in Ayurveda by tribal people of Raigarh district, Chattisgarh state, India". *J. Drug Res. Ayurved. Sci.* 2(1): 40–48. Abstract: There are a large number of classical Ayurvedic plants that are used as vegetables by tribal communities of raigarh district. These plants profusely grown on wastelands that are free of insecticides/pesticides and give new relish vegetables. These vegetables are not popular among common people or they feel inferior to accept these vegetables in their diet. The consumption of such important plant resources should be popularised as they could be beneficial resource for prevention, management and treatment of chronic diseases. The present study deals with the medicobotanical survey work of Dharmajaygarh and raigarh forest divisions of Raigarh district, Chhattisgarh, India. These vegetables are arranged in their useful parts, e.g. leaf, fruit, tuber etc., their Ayurvedic name, local name, botanical name, family and part used followed by their Ayurvedic and local uses. The study reveals the utilization of 31 classical Ayurvedic vegetables (saka) by tribal people of Raigarh district. Vegetables like *Enhydra fluctuans* Lour., *Corchorus capsularis* L., *Leucas cephalotes* (Roth) Spreng.,

*Boerhavia diffusa* L. *Senna tora* (L.) Roxb., *Celosia argentea* L. *Lathyrus sativus* L., *Centella asiatica* (L.) Urb., *Tamilnadia uliginosa* (Retz.) Tirveng. & Sastre, *Dioscorea alata* L., etc. are unique in this area. The study suggests that the inclusion of these herbs in the regular diet of common people helps in prevention and management of various ailments.

1289. **Landge, L.J. & Kalse, A.T. 2014.** "Indigenous herbal medicines used by tribal people in Satpuda Mountain". *Int. Sci. J.* 1(1): 65–69.
1290. **Lone, Z.A. & Khan, F. 2018.** "Ethnogynaecological health disorders and their ethnomedicinal treatment by the Gond tribals of Raisen district of Madhya Pradesh-India". *Int. J. Advance Res. Sci. & Engineer.* 7(4): 1976–1988. Abstract: Plants have traditionally served as mans most important weapon against pathogen. India is repository of herbal medicines and there are evidences that herbs are predominant in the treatment of various diseases for revitalizing body system from ancient civilization. An important prerequisite for proper utilization of raw materials of the country is the survey of its natural resources and the preparation of an inventory. It is necessary that we should have full knowledge regarding of occurrence, frequency, distribution and phenology of various plants for their proper utilization. The present study has been carried out in Raisen District of Madhya Pradesh, India, the predominant tribal community has their settlements in different areas in district Raisen. Thirty eight medicinal plants belonging to twenty nine families are identified which have been employed by the tribal community for the treatment of different diseases in tribal women's sexual disorders. The plants have been tabulated with Botanical name, family, local name, administration and voucher specimen number etc.
1291. **Lone, Z.A., Khan, S.S. & Khan, F. 2014.** "Plant sources for the healing of ophthalmic diseases by the tribals of district Raisen (M.P.), India". *Indo American J. Pharmaceut. Res.* 4(5): 2374–2378. Abstract: Our eyes are very delicate organs that require constant care to keep them in good health. Apart from the disease of the eyes, the body has a lot of diseases that reflect themselves in the health of the eyes. Among the many diseases that can affect the eyes include the metabolic diseases, stomach disorders, infections, kidney disorders and allergic reactions etc. The Raisen district in the central India is the home of numerous herb species. The agro climatic conditions prevailing in the region provide an ideal habitat for the natural growth of a variety of plants and herbs, which provide raw material for pharmaceutical, phytochemical, food, flavouring and cosmetic industries. The present paper provides information on 6 medicinal plants belonging to 6 different families and used by the Gond, Bhill and Baiga tribes of Raisen district of Madhya Pradesh, India for the ophthalmic disorders. Information was collected from local tribals pertaining to the use of various species of plants employed by them in ophthalmic disorders. Herbalists, herb sellers and traditionalists living within the area of study were interviewed by the administration of questionnaires. A need for further

scientific research based on the findings of this survey is indeed very necessary and recommended so that adequate records of indigenous methods for the management of ophthalmic diseases can be kept for posterity especially in the study area . A need for analytical work on the plants identified as useful for the treatment of ophthalmic diseases is also necessary in order to determine the actual dosage applicable so that the medicinal values of these plants could be made available to humanity and hence reduce the ophthalmic disorders in tribal people of district Raisen. More attempts should be made to authenticate and evaluate the efficacy of these herbs and products used by tribals.

1292. **Lone, Z.A., Lone, Y., Khan, S.S., Wani, A.A. & Reshi, M.I. 2015.** "Hepatoprotective medicinal plants used by the Gond and Bhil tribals of district Raisen, Madhya Pradesh, India". *J. Med. Pl. Res.* 9(12): 400–406. Abstract: The ethnobotanical survey of the medicinal plants used in the management of jaundice (hepatic disorder) was carried out in the district Raisen of Madhya Pradesh. The herbalists, herb sellers and traditionalists were interviewed by the administration of questionnaires. Floristically, the area is placed in Malwa plateau region of Madhya Pradesh. Aims of the study were to document the medicinal plant resources and their use patterns by the local people. A total of 19 plant species belonging to 16 families were reported as locally used for the hepatic disorder purposes. Majority of the recipes are prepared in the form of decoction from freshly collected plant parts. Mostly a single species is used and taken orally. Field observations showed that vegetation of the area was generally threatened with the ignorance of local communities. The trends like urbanization, deforestation, over grazing, habitat fragmentation, unscientific extraction of natural vegetation, introduction of the exotic taxa and habitat loss were the visible threats. Measures for the conservation of plant resources especially medicinal plants of Raisen district of Madhya Pradesh are urgently needed. Some of the important species for the alleviation of hepatic disorders are *Aegle marmelos*, *Azadirachta indica*, *Cajanus cajan*, *Cuscuta reflexa*, *Gloriosa superba* and *Ricinus communis*.
1293. **Mahajan, S.K. 2007.**"Traditional herbal remedies among the tribes of Bijagarh of West Nimar district, Madhya Pradesh". *Indian J. Tradit. Knowl.* 6(2): 375–377. Abstract: The paper reports about the traditional herbal remedies common among the tribal people of Bijagarh of West Nimar district of Madhya Pradesh. In all, 38 species belonging to 37 genera and 21 families, used by the tribals in the treatment of various human ailments are reported.
1294. **Mahajan, S.K. 2008.** "An ethnobotanical study of Sambharpat of West Nimar district of Madhya Pradesh". *J. Econ. Taxon. Bot.* 32(Suppl.): 13–16. Abstract: The present communication deals with the ethnobotanical study of Sambharpat and its neighbourhood areas (27°45' N longitude, 75°30' E latitude and 250 m above m.s.l.). The study revealed in all 16 taxa belonging to 16 genera and 12 angiospermic families that are used by

the tribal people to cure various human diseases.

1295. **Mahajan, S.K. et al., 2003.** "A preliminary survey of the anthelmintic plants used by the tribals of west Nimar district, M.P.". *Plant Diversity Human Welfare and Conservation*, 289–292.
1296. **Mahajan, S.K. & Garde, Y. 2004.** "Traditional herbal remedies among the Bhilalas of West Nimar district, M.P., India". *Bull. Bot. Surv. India* 46(1-4): 325–329. Abstract: Traditional herbal remedies common among the Bhilalas of West Nimar district of Madhya Pradesh are reported. In all 29 species belonging to 28 genera and 21 families are recorded. Their correct scientific names, local names, parts used and mode of administration are mentioned for each plant.
1297. **Mahajan, S.K. & Khare, B. 2004.** "An ethnobotanical study of the tribals of Barwani district of Madhya Pradesh". *Bull. Bot. Surv. India* 46(1-4): 356–359. Abstract: Ethnobotanical survey of the tribals of Barwani district has been done during 1999-2000. In all 18 species belonging to 17 genera and 15 families are reported which are used by the tribal people. The juice of the young leaves of *Ficus religiosa* to cure any type of heart disease is of considerable importance and noteworthy.
1298. **Maheshwari, J.K. 1989.** Case study of three primitive tribes of M.P. (Abujhmarias, Baigas, and Bharias) of Central India. In: Jain, S.K. (Ed.), *Methods and approaches in Central India*. Lucknow, Society of Ethnobotanists. Pp. 187–188.
1299. **Maheshwari, J.K. 1990.** "Recent ethnobotanical research in Madhya Pradesh". *SEB Newsletter* 9(1-3): 5.
1300. **Maheshwari, J.K. 1990.** Tribal people and eco-development of Narmada valley, M.P. In: Negi, N.S. & Gaikwad, J. (Eds.), *Socio-cultural Dynamics of Tribal Development*. Tribal Research and Training Institute, Pune. Pp. 83–91.
1301. **Maheshwari, J.K. 1996.** "Ethnobotanical documentation of primitive tribes of Madhya Pradesh, India". *J. Econ. Taxon. Bot., Addit. Ser.* 12: 206–213. Abstract: Madhya Pradesh situated in the heart of the Indian Peninsula has the largest concentration of tribal population (about 15.4 million) in the country. The primitive tribal groups numbering seven, viz., Abujhmarhia, Korwa, Kamar, Baiga, Bharia, Birhor and Saharia still depend on the forest resources for sustenance and livelihood. They include shifting cultivators, forest-dwellers and artisans facing the danger of acculturation or extinction as a result of deforestation, urbanization, industrialization, mining operations, river valley projects and changing subsistence economics. Ethnobotanical surveys and documentation were undertaken with a view to prepare resource inventories of plants used for food, fibre, medicine, material and energy. Over 550 species of plants are used in traditional and folk medicine. The phytochemical and biological screening has corroborated the reported ethnomedical uses of plants like *Euphorbia fusiformis*, *Adina cordifolia*, *Nyctanthes arbour-*

*tristis* etc. Hence, we need to expand ethnobotanical field research and documentation to ensure that the traditional knowledge of tribal people is not lost for all time. Further, the sustainable utilization of plant resources can only be achieved if the region can retain a large proportion of its ethnobotanical diversity.

1302. **Maheshwari, J.K. & Dwivedi R.P. 1985.** "Ethnobotany of Abujmarhia tribe of Bastar district, M.P.". *J. Indian Bot. Soc.* 64: 53–56.
1303. **Maheshwari, J.K. & Dwivedi, R.P. 1988.** Ethnomedicinal plants of Bharia tribes of Patalkot Valley, Chhindwara district, M.P. In: Kaushik, P. (Ed.), *Indigenous medicinal plants including microbes and fungi*. Today and Tomorrow Printers and Publishers, New Delhi. Pp.139–155.
1304. **Maheshwari, J.K. & Painuli, R.M. 1990.** "Plants used in tribal crafts by Sahariyas of M.P. An account of a few trees in their life". *Folklore* 31: 239–243.
1305. **Maheshwari, J.K., Kalakoti B.S. & Lal, Brij. 1986.** "Ethnomedicine of Bhil tribe of Jhabua district, M.P.". *Ancient Sci. Life* 5(4): 255–261. Abstract: The Bhils are inhabitants of Dhar, Jhabua, Khargone and Ratlam districts of Madhya Pradesh. A large number of Bhils live in the neighbouring States of Maharashtra, Gujarat and Rajasthan. They constitute the third largest tribe of India; the first two being Gonds and Santhals. They utilize a large number of plant species occurring wild in the district as herbal remedies in various diseases and ailments. An ethno-medico-botanical survey was conducted in the tribal blocks viz. Kathiware, Alirajpur and Sodhwa blocks of Jhabua district, M. P. The authors have gathered first-hand information on seventy - five plant species and their mode of therapeutic uses from the tribal medicine men 'Badwa' and other experienced tribals. The present study has brought of light some interesting data on potential medicinal plants which will be screened for determining their therapeutic and pharmacodynamic properties.
1306. **Maheshwari, J.K., Painuli, R.M. & Dwivedi, R.P. 1997.** Notes on ethnobotany of the Oraon and Korwa tribes of Madhya Pradesh. In: Jain, S.K. (Ed.), *Contribution to Indian Ethnobotany* (3rd Ed.), Scientific Publishers, Jodhpur. Pp. 75–90.
1307. **Mahmood, T. 2011.** "Medicinal plants used by tribal people to cure skin diseases in Madhya Pradesh in India". *Life Sci. Bull.* 8(2): 288–290. Abstract: At present many thousand peoples are suffering from various types of skin diseases. Skin diseases are spreading day by day not only in India but also all over the world reasons are radiation effects, climates changes and a lot of side effects of synthetic drugs. This paper deals with some medicinal plants used by herbal healer in the treatment of skin diseases in Madhya Pradesh. Some plant species reported along with dosage rate and mode of administration have enumerated.
1308. **Malaiya, Preeti Sagar. 2016.** "Medicinal plants used by tribal population of Anuppur

- district Madhya Pradesh, India”. *Int. J. Appl. Res.* 2(1): 418–421. Abstract: The present paper deals the traditional ethnomedicinal knowledge of different tribes of Anuppur district of Madhya Pradesh, India. With the help of standardized questionnaires, traditional healers and resource persons were interviewed on medicinal use of local flora in all the tribal villages of Anuppur district during July, 2014 to December, 2015 and some of the places were revisited for this purpose again during July to December of 2015. Total of 46 plant species belonging to 42 genera and 27 families were reported to be used for treating 33 various physical ailments. In terms of the number of medicinal plant species, Fabaceae (5 species) and Euphorbiaceae (4 species) are dominant families. Among different plant parts used for the preparation of medicine, leaves were most frequently used for the treatment of diseases. In all tribal villages I found the use of medicinal plants, particularly to treat common physical problems like smaller injuries, stomachache and abdominal disorder. However, non-availability of such plants in close vicinity is imposing restriction on using medicinal plants. Further research on these species may lead to the discovery of novel bioactive molecules in one hand and also it may open up a new horizon of sustainable development.
1309. **Malaiya, Preeti Sagar. 2017.** “Traditional medicine among the rural folk of Anuppur district Madhya Pradesh, India”. *Int. J. Bot. Stud.* 2(1): 117–120. Abstract: The present study carried out in the rural areas of Anuppur district of Madhya Pradesh, concerns the traditional use of indigenous herbal medicines against various diseases. Thirty medicinal plants have been mentioned along with their botanical name, families, local name, locality and medicinal uses.
1310. **Malaiya, Preeti Sagar. 2017.** “Indigenous herbal medicines used by tribal people in Satpuda Mountain Amarkantak, district Anuppur (M.P.)”. *J. Med. Pl. Stud.* 5(1): 266–269. Abstract: According to the survey taken in Amarkantak, Anuppur district of Madhya Pradesh, India in the year of 2015-2016 various medicinal plants are present. The tribal people like Bhil, Gond and Baiga are used these plants for different diseases. The use of these herbal medicines has important role in the modern medicine stream like homeopathy, ayurveda, unani etc. The use of herbal medicine is not only cost effective but also safe and almost free from serious side effects. A total 70 medicinal plants species distributed in 37 families in this districts. These medicinal plants are use for headache, earache, stomachache, antioxidants enriched plants, liver protective, renal protective, antidiabetic, abortifacients, wound infections, skin infections, fever, cough, diarrhea, eye infections, general weakness, blood purifier medicinal plants etc.
1311. **Malviya, J., Joshi, V. & Singh, K. 2012.** “Antimicrobial activity of some ethno-medicinal plants used by Baiga tribes from Amarkantak, India”. *Advances Life Sci. & Technol.* 4: 19–26.



1312. **Malviya, N., Jain, S., Gupta, V.B. & Vyas, S. 2011.** "Indigenous herbal remedies used by the tribal of Madhya Pradesh for improving their sexual performance and problem associated with sexuality". *Int. J. Res. Ayurveda Pharma.* 2(2): 399–402. Abstract: The present study was aimed to document medicinal plants included by various ethno botanists in their report prepared by survey on indigenous knowledge of tribes of Madhya Pradesh on traditional medicinal plants used by them for improving their sexual performance and problem associated with sexuality. A total of 42 medicinal plants mentioned by botanists in their survey reports based on their informal and formal discussion, field visits and focused semi-structured interviews with tribes of Madhya Pradesh. Medicinal plants having potential to influence components of male sexual response cycle and treating diseases associated with them are compiled by their botanical name, family, common name, parts used and uses. Some of them are scientifically already explored while other cilinical and pharmacological investigations are yet to be performed.
1313. **Masih, S.K. 1990.** *Ethnobotanical studies in tribal areas of Bastar and Jabalpur, Madhya Pradesh.* Ph.D. Thesis, Rani Durgavati Viswavidyalaya, Jabalpur (unpublished)
1314. **Masih, S.K. 1997.** "Antidiabetic plants of Madhya Pradesh". *Indian J. Appl. Pure Biol.* 12(1): 11–14.
1315. **Masih, S.K. 2000.** Diversity of ethno-medicinal wealth in Amarkantak plateau region (India). In: Khan, S.S. (Ed.), *Vistas in Ethnobotany.* Indian Journal of Applied and Pure Biology, Bhopal. Pp. 204–213.
1316. **Masih, S.K. 2008.** "Ethno-medico-botanical studies in Pench Tiger Reserve, Madhya Pradesh". *J. Econ. Taxon. Bot.* 32(Suppl.): 104–115. Abstract: Pench Tiger Reserve is situated in the Satpura hills of Seoni and Chhindwara districts of Madhya Pradesh. About 93 species having ethno-medico-botanical uses in and around the Reserve have been identified during present study. The correct botanical names, local names, name of family and medicinal uses have been represented in a systematic manner in this communication, besides general information about the area, forest types, villages and villagers, their occupation, etc. It is hoped that present study will be helpful in sustainable utilization of resources, better management of the reserve and conservation of biodiversity and traditional folk knowledge.
1317. **Masih, S.K. 2012.** "Food plants of Madhya Pradesh". *J. Econ. Taxon. Bot.* 36(3): 513–542. Abstract: An ethnobotanical investigation carried out by the author in different village localities, forest areas, eco regions and agro climatic zones of Madhya Pradesh from 1986 to 2007 inspired to preparare and contribute this paper. Paper presented an account of 733 plant species belonging to 126 families and 385 genera utilized as food, famine fod during scarcity by the tribal, local villagers, forest dwellers, etc. in Madhya Pradesh. Individual Edibility Percentage (IE%) of each species revealed that

IU% classes represented (16%) plant species whereas B (33%), C (50%), D (60%) and E (more than 60%) recorded 459, 189, 61, 1 and 11 species. Different part(s) namely rhizome/roots, stem/shoots, leaves, flowers, fruits and seeds represented 80, 114, 240, 68, 361 and 204 respectively.

1318. **Masih, S.K. & Towari, V. 2013.** "Plant diversity in sacred groves of Hoshangabad district (Madhya Pradesh)". *Indian J. Forest.* 36(4): 475–486. Abstract: The present paper represent the diversity status of plant species inside the sacred groves which is known for the aesthetic value places from the very past. These aesthetic value pockets are also said conservation pocket which is a model of conservation strategy from very long period in India. To understand the role of sacred groves in conservation biology study was conducted in Hoshangabad district during 2010-2011 and documented total 78 sacred groves from the area and assessed their plant diversity. Total 255 plant species of 203 genera belongs to 81 families have documented. Total 91 tree species encountered during study which 48 species found above 20 cm GBH and its diversity index found 3.49 which is quite good from the adjoining natural forest.
1319. **Masih, V., Sahu, P.K. & Singh, M. 2013.** "Observation on ethno-medicinal herbs of Dantewada, Chhatisgarh, India". *Int. J. Drug Discovery & Herbal Res.* 3: 644–648.
1320. **Mishra, A. 1998.** *Studies on biology of some ethno-medicinal plants of Sagar region.* Ph.D. Thesis. Dr. H.S. Gour University, Sagar, M.P., India. (Unpublished).
1321. **Mishra, A.K., Singh, N. & Sharma, V.P. 1995.** "Use of neem oil as a mosquito repellent in tribal villages of Mandla district, Madhya Pradesh". *Indian J. Malariology* 32(3): 99–103.
1322. **Mishra, D., Rajesh, Chakravarty, M. & Gotam, M.P. 2006.** "Traditional medicinal practices among the various tribal groups of Kanker district of Bastar division". *Indian Forester* 132(7): 850–855. Abstract: The present study is an attempt to explore the ethno-medicinal system of the tribal and rural areas of the Knker district, Bastar Division (Chhattisgarh) not as a set of abstract beliefs and practices, in isolation, but as an essential part of the tribal social structure. The syudy mainly deals with the indigenous herbal mode of treatment among the tribal and rural people of the area. Though modern medical facilities are present in that area but herbal remedies play an important role in their culture. It is an interesting fact that they accept modern medicine, but have ardent faith in herbal medicines and use them for different types of sufferings.
1323. **Mishra, D.P. & Sahu, T.R. 1984.** "Euphorbiaceous plants used in medicine by tribals of Madhya Pradesh, India". *J. Econ Taxon. Bot.* 5: 791–794. Abstract: The paper deals with 33 Euphorbiaceous species which are considered to be of medicinal uses by the tribals of Madhya Pradesh.
1324. **Mishra, M., Kotwal, P.C. & Mishra, R.P. 2009.** "Indigenous practices to ensure sustainability of Baichandi *Dioscorea hispida* Dennst. Tubers in the natural forest of Mandla

district, Madhya Pradesh". *J. Econ. Taxon. Bot.* 33(4): 978–985. Abstract: The paper illustrates local indigenous systems that have evolved along the years for collection and processing of Baichandi (*Dioscorea hispida* Dennst.) tubers through a case study from a village Bhanpurkheda in Mandla district, Madhya Pradesh. The tubers are collected and processed by the local people by various indigenous methods since ages. Baiga (445 population) is one such primitive tribe that is evolved in collection, processing and sale of Baichandi. The study has estimated that Baichandi contributes to approximately 24.5% of the total annual income of a household. Traditional collection methods do not cause serious damage to the mother plants and thus ensure sustainability. Now due to poverty, the locals try to collect more and more quantity of Baichandi tubers in pursuit to enhance the income by sale. The study reveals that creating awareness on medicinal values of the plant, few small modifications in the processing and improved marketing would enhance the returns to the Baiga community in Mandla district.

1325. **Mishra, N.P. & Patil, P. 2014.** "Ethno-medicinal plants used for curing skin diseases by tribal of Betul district, Madhya Pradesh". *J. Global Biosci.* 3(4): 731–734. Abstract: The present investigation was carried out in Betul district, Madhya Pradesh a region dominated by the Korku and Gond tribes. A large number of traditional herbal healers exist belonging to the tribal community and are utilizing local plants in Skin disorders. The study thus underlines the potentials of the ethnobotanical research and the need for the documentation of traditional ecological knowledge pertaining to the medicinal plant utilization for the greater benefit of mankind in different regions.
1326. **Mishra, O.P. & Naquvi, S.M.A. 1995.** "Ethno-medico-botany from tribes of Madhya Pradesh". *Bull. Med.-Ethno-Bot. Res.* 16(1-2): 17–26.
1327. **Mishra, R.P. 2016.** "Ethnobotanical study of Sidhi district of Madhya Pradesh". *Int. J. Pharm. Life Sci.* 7(10-11): 5311–5314. Abstract: Sidhi District is well known for rich population of tribals. These tribal peoples are very rich in their culture, tradition and faith on natural resource and nature. These aboriginals have gathered knowledge through long experiences of interaction among their surrounding flora and fauna of the respected. Men civilization started and poses away with modern society through the principle of sustainability. Phytopathy is somewhat different from 15at of all modern pathy exist in the world. Men have long history and faith on plants and nature. Long experiences of knowledge particularly on phytopathy based on old epics such as puran, Ramayana etc. these tribes have great tradition and believe on recovery of ailments from various diseases. The arrangement has been made for Sidhi district to ones the potential of economic and ecological importance of flora of region related with the culture and tradition of tribal peoples. The survey and inventory have been prepared. 394 plants have been recorded. 19 categories have been made. Maximum 90 medicinal plants have been noted followed by 78 fuel yielding plants and 62 food and vegetable

plants etc. majority of plants have been conserved by these peoples for safety of nature and natural resources. Among number of uses this is areite astonishing that 6 plants have been recorded as psychotropic drug for hallucinogen. The various base level uses which are indeed important for family like milk yield production. The indigenous plants can enhance the ecology and economy of these rural poors. Their experiences broaden the spectrum of knowledge that can be used in judicious manner for the welfare of human kind.

1328. **Mishra, R.P. 2017.** "Study of ethnobiology and ecological of Sidhi district (M.P.)". *Int. J. Pharm. Life Sci.* 8(2): 5473–5476. Abstract: Madhya Pradesh the heart of India comes under central zone of Tribals areas (Sharna 1984). Besides M.P. which has heights population of Tribals i.e. 11.98 millions the other Tribal zones with their Tribal populations are West Bengal (3.07 Million), Orissa (5.91 million), Bihar (5.8 million), Rajasthan (4.18 million), Maharashtra (5.77 million), and Gujrat (4.85 million), in the general Tribes of central zone speak dialects of either Austic of Dravidian family of language. Physical features of these Tribes are mostly Protoaustraloid. These tribal people are very rich in their culture, tradition and faith on natural resource and nature. These aboriginals have gathered knowledge through long experiences of interaction among their surrounding flora and fauna of the respected. As the present study was confined to the ethnobiology of the Sidhi districts the observation automatically restricted to the flora, Faunal and forest resources used by Tribes. So for the clear understanding of the work observation are divided in to three major parts. Flora of Tribal uses, Fauna of Tribal Uses and Forest dependence of the Tribes. Flora is a group which includes numerous plant all over the world. These Tribal communities of Sidhi district collect and utilized a large number of plant in many ways, Flora is utilized as seeds, words, leaves, tuber's, roots, gums, and resins of many wild and cultivated plant by Tribal communities, the Tribal communities are growing plant species in forest for food, fodder, fuel, cordage-medicine, oil, gum, resin, fishpoision, housing, music instruments, agriculturalimplements, social and religious ceremonies etc. Fauna is a group of non vertebrates and vertebrate animals all over the world the Tribals communities use this group for medicine, food, music, religious, significance etc. it has an enormous range of wild animals. The Indian sub continent represents the greatest emporia of the Ethnobiological wealth. A large number of tribal communities who live in remote and accessible part of the country depend on this group for their fundamental needs and livelihood. Human culture has been influenced direct or indirectly. It has been changed by animal kingdom since pre-historic times. Tribal communities of Sidhi district collect and utilized a large number of animals. Product in many ways, Fauna is utilized as horn, skin, hair, bones, flash, urine, feather, blood, and scale of many wild and domestic animals by tribal communities.
1329. **Mishra, S. 2008.** "Ethnomedicinal studies of Korku tribe, with Gotra names derived

- from plant names, from Khandwa district in Madhya Pradesh". *Ethnobotany* 20: 122–127. Abstract: The present work reports ethnomedicinal uses of plants practised by Korku tribals from Khandwa district in Madhya Pradesh. These tribals have their Gotras or clan names based on the names of certain plants, showing their close affinity to them. These symbols are called their 'Totem'. The study deals with 31 angiospermic species belonging to 28 genera of 19 families used for treatment of various ailments. These plants are prevalent among the forest ranges of Khandwa district.
1330. **Mishra, S. 2012.** "Plants used as vegetables by Korku, Gond and Nihal tribes in East Nimar region of Madhya Pradesh". *Ethnobotany* 24: 96–100. Abstract: During an ethnobotanical survey, 373 plant species occurring in East Nimar region of Madhya Pradesh were studied, out of which sixty species were found to be used as vegetable directly or indirectly by the tribals of the area. The plant parts used as vegetable most commonly in one locality vary frequently from those used in other locality. In the present paper, sixty species are enumerated; these belong to 53 genera and 34 families.
1331. **Mishra, S. 2017.** "Plants in contact therapy used among tribals of East Nimar, Madhya Pradesh, India". *Ethnobotany* 29: 39–44. Abstract: The tribals have deep faith in supernatural powers of some plants which are associated with taboos, safeguard against evil spirit, riddance from diseases etc. These are used in amulets, necklace, touch therapy, fumigation and in incantations etc. The plant parts are worshipped before their use in touch therapy. The plant parts associated with amulets are mostly for preventing and guarding evil spirits and incurable disease. Mostly, the plant part is tied to the right or left arm or the waist or the affected part with a thread. The present study deals with 53 plant species distributed over 35 families.
1332. **Mishra, S. & Mujaffar, S. 2014.** "Some unreported ethnobotanical uses of *Amorphophallus* (Araceae) among the tribes of East Nimar, Madhya Pradesh (India)". *Ethnobotany* 26: 96–99. Abstract: Madhya Pradesh is well known for its floristic diversity possessing diverse ethnomedicinal properties. Information on ethnomedicinal uses of *Amorphophallus konkanensis* Hett. Yadav & Patil, *Amorphophallus paeoniifolius* (Dennst.) Nicols. Var. *campanulatus* (Decne) and *Amorphophallus longiconnectivus* Bogner species collected from the Korku, Gond and Nihal tribes of east Nimar (M.P.) has been described in the present paper. *Amorphophallus* is used since long time for treating rheumatic pains, to cure toothache and general debility etc. The information including the various data such as local names, ailments, diseases treated, methods of preparation were obtained from tribes through individual and face-to-face interviews.
1333. **Mishra, S., Sharma, S., Vasudevan, P., Bhatt, R.K., Pandey, S. & Singh, M. 2010.** "Livestock feeding and traditional healthcare practices in Bundelkhand region of Central India". *Indian J. Tradit. Knowl.* 9(2): 333–337. Abstract: Livestock is an important component of agriculture in India. In Bundelkhand region of Central India, animals are

reared for milk, manure, draft and as wealth. The traditional practices in animal feeding and healthcare are area specific and depend upon the locally available bioresources. In the study, efforts have been made to evaluate the livestock feeding calendar and traditional healthcare practices by participatory rural appraisal, survey and focused group discussion. The fodder and feed resources being used in the area are poor in quality and not easily available. The plant and raw material used in disease control were found to have strong scientific validation. This further justifies the importance of traditional practices. The blending of traditional knowledge with modern system and improved technologies is needed for wider acceptability and adaptability by farmers.

1334. **Mishra, S.K. 2015.** "Ethnomedicinal plant resources of tribe of Vindhyan region of Madhya Pradesh". *Asian J. Res. Pharma. Sci.* 5(2): 86–90. Abstract: Today, human beings, particularly the urbanites, are far removed from their plant, benefactors. But the rural and aboriginal folk are very much in harmony with nature for their various needs; they depend largely on plants. But due to rapid modernization, acculturation and resultant greatly enhanced needs; this environmental harmony is getting disturbed. Rural folk are often discarding their age old traditions and are getting absorbed into the process of modernization.
1335. **Mishra, S.K. 2015.** "Less known uses of ethnomedicinal plants among tribes of Vindhyan region of Madhya Pradesh". *Res. J. Sci. & Technol.* 7(2): 121–124.
1336. **Mohanty, P.C. 1967.** "Food habit of a tribal community". *Adibasi* 9: 20–25.
1337. **Mukherjee, P. & Wahile, A. 2006.** "Integrated approaches towards drug development from Ayurveda and other Indian system of medicines". *J Ethnopharmacol.* 103: 25–35.
1338. **Nag, K. & Zia-ul-Hasan. 2013.** "Ecological study of medicinal wild herbs in Mayur Garden at Bhopal city, Madhya Pradesh, India". *Advances Appl. Sci. Res.* 4(4): 155–159. Abstract: A field survey of wild herbs of Mayur Garden of Bhopal City was conducted during October 2008 to October 2009 to find out the presence of wild herbs in gardens of the Bhopal city. The study revealed that the gardens were infested with thirty eight wild herbs belonging to fourteen families. The most dominant families were Asteraceae and Poaceae. The most prominent wild herbs were *Vernonia cinerea* (Linn.) Less., *Amaranthus viridis* Linn., *Oxalis corniculata* Linn., *Dichanthium annulatum* Forsk., *Echinochloa colonum* (Linn.) Link in winter season. In rainy season *Gomphrena celosioides* Mart and in summer season *Cyanadon dactylon* (Linn.) Pers., *Eclipta prostrata* Linn. and *Parthenium hysterophorus* Linn. found in highest frequency percentage.
1339. **Nag, K. & Zia-ul-Hasan. 2013.** "Study of some rare medicinal wild herbs from gardens of Bhopal city, Madhya Pradesh (India)". *Int. J. Pharm. Life Sci.* 4(3): 2437–2439. Abstract: The present paper reports the medicinal uses of 12 rare wild herbs from gardens of Bhopal city (Madhya Pradesh) belongs to 6 angiospermic families and 12 generas. Data was systemically arranged in alphabetic order of botanical name followed by

Botanical name/ Voucher Number, local name, family, parts of wild herb and medicinal uses.

1340. **Nagar, M. 1985.** The use of wild plant foods by aboriginal communities in Central India. In: Misra, V.N. & Bellwood, P. (Eds.), *Recent Advances in Indo-Pacific Prehistory*. Oxford & IBH, New Delhi. Pp. 337–342.
1341. **Naharia, A.L. & Vaishnav, T.K. 1997.** "Indigenous knowledge of ethno-(herbal) medicine among tribes of Pataalkote valley, Madhya Pradesh". *Bull. TRJ, Bhopal* 25(2): 30–35.
1342. **Nappit, R.S., Shrivastava, D.K. & Mishra, S.K. 2011.** "Ethno-medico botanical Study of Paliha Tribe of Gohparu block, district Shahdol, M.P. (India)". *J. Trop. Forest.* 27(1): 62–64. Abstract: The present paper deals with 23 plants species which are used traditionally since ancient times by Paliha tribes for the treatment of various ailments , such as pain, skin disease, headache, piles asthma, fever, jaundice, diarrhoea, vomiting, wounds dysentery, etc. Some plants species are reported along with plant parts and some local formulation used medicinally for the treatment of various disorders.
1343. **Nath, V. & Khatri, P.K. 2010.** "Traditional knowledge on ethnomedicinal uses prevailing in tribal pockets of Chhindwara and Betul districts, Madhya Pradesh, India". *African J. Pharma. & Pharmacol.* 4(9): 662–670.
1344. **Nath, V. & Khatri, P.K. 2010.** "Documentation of traditional knowledge on ethno-medicinal information from traditional herbal healers in Jabalpur and Seoni District, Madhya Pradesh". *J. Trop. Forest.* 26(3): 26–42. Abstract: 52 and 152 plant species were documented as medicinal plants being used by the traditional herbal healers in the Jabalpur and Seoni district respectively.
1345. **Nath, V. & Khatri, P.K. 2011.** "Traditional knowledge on ethno-medicinal uses prevailing in tribal pockets of Harda and Raisen districts of Madhya Pradesh". *Indian Forester* 137(9): 1071–1076. Abstract: The present paper deals with the traditional knowledge gathered on medicinal plants used against various diseases from traditional herbal healers of Harda and Raisen districts of Madhya Pradesh, India. Information collected from the traditional healers locally known as Vaidhya/Ojha has revealed that plant/ plant parts of 37 species from Harda district and 60 species from Raisen district of forest origin are being utilised as paste, powder, juice, decoction and extract for the treatment of various human diseases. Habit and utilization of plants and the percentage of different formulation of herbal medicine being prepared by the herbal healers of the study area have also been documented.
1346. **Nath, V., Rai, Rajiv & Shukla, P.K. 2002.** "Medicinal plants used by Hill Korwa tribe of Chhattisgarh in Central India". *J. Trop. Forest.* 18(4): 67–77. Abstract: Hill Korwa is one of the primitive tribes, predominant in pockets of Ambikapur (Sarguja), Korba, Bilaspur and Raigarh districts of Chhattisgarh in Central India. The tribe belongs to Kolarian family of tribes who had originated in Sri Lanka and migrated to different pockets in

the states, of Jharkhand, Chhatisgarh and Uttar Pradesh. These tribals have immense knowledge on uses of folk medicines. They utilize plants of forest origin as herbal drugs, antidotes against snake bite, scorpion sting and fish poison, in muscular and joint pains, swellings, fever, healing fractures, controlling and regulating menstrual cycle in and increasing lactation in women during delivery period. Plants are also used to control cold, cough, bronchitis, asthma, night blindness, diarrhoea, dysentery, rheumatism and jaundice. Thirty one such plants used for different medicinal purposes by Hill Korwa tribe have been recorded and enumerated along with their characteristics in this paper.

1347. **Nawange, S.R. & Shrivastava, A. 2014.** "Antimicrobial activity of some ethnomedicinal plants used by tribals of Mandla district, Central India". *Int. J. Pharm. Life Sci.* 5(9): 3867–3871. Abstract: Antimicrobial activity of 10 ethnomedicinal plant extracts were evaluated against nine bacterial Strains, *Bacillus subtilis*, *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Enterococcus faecalis*, *Escherichia coli*, *Klebsiella pneumonia*, *Pseudomona saeruginosa*, *Ervinia sp*, *Proteus vulgaris* and one fungal strain *Candida albicans*. The collected ethnomedicinal plants were used in folk medicine in the treatment of skin diseases, venereal diseases, respiratory problems and nervous disorders. Out of 10 plants, 6 plants exhibited antimicrobial activity against one or more of the tested microorganisms at three different concentrations of 1.25, 2.5 and 5mg/disc.
1348. **Nayak, P. & Kalidass, C. 2016.** "Ethnobotany, phytochemistry, pharmacognostic and pharmacological aspects of *Cordia macleodii* Hook.f. & Thomson— A review". *J. Non-Timber Forest Prod.* 23(2): 67–71. Abstract: *Cordia macleodii* Hook.f. & Thomson is an important ethnomedicinal plants of India. It is found in the moist and dry deciduous forests of peninsular India such as Odisha, Madhya Pradesh, Chhattisgarh, Tamil Nadu, etc. The plant is used ethnomedicinally for various purposes like healing wounds, mouth sores, treating jaundice and also as an aphrodisiac by the tribal people where it is found. Its pharmacological activities include anti-microbial, wound healing, anti-oxidant and hepatoprotective, anti snake venom, analgesic and anti-inflammatory activity. Many phytocompounds like quercetin, p-hydroxyphenylacetic acid and phytosterol such as  $\beta$ -sitosterol, stigmasterol, camphesterol and cholest-5-EN-3OL (3 $\beta$ )-Carbonyl chlorinated are isolated from this plant. The present work aims at presenting a comprehensive of the plants botany, ethnomedicinal uses, chemical constituents, pharmacognostic and pharmacological uses. The information reported in this work contributes scientifically to recognizing the importance of *Cordia macleodii* as a target in the search for new biotechnological investments.
1349. **Nonhare, B.P., Sahu, T.R. & Sahu, P. 2003.** "Some promising economic ethnomedicinal plants of Bastar district, Chhattisgarh". *J. Econ. Taxon. Bot.* 27(2): 283–294. Abstract: The paper enumerates 56 species of plants which are used in ethnomedicine by the tribals of Bastar district, Chhattisgarh. Local name, Gondi/Halbi name, nature, parts



used, collection season and market rate have also been provided. Causes of depletion and suggestions are also discussed.

1350. **Oommachan, M. 1986.** "Observation on certain plants used in human skin disease in Central India". *Indian J. Appl. Pure Biol.* 1(1): 23–27.
1351. **Oommachan, M. 1987.** "Multifarious uses of plants by the tribals of Madhya Pradesh- I. Medicinal plants". *Indian J. Trop. Forest.* 4(2): 163–169.
1352. **Oommachan, M. 1988.** "Multifarious uses of plants by the forest tribals of Madhya Pradesh- II. Wild edible plants". *Indian J. Trop. Forest.* 5: .
1353. **Oommachan, M. & Masih, S.K. 1987.** "Multifarious uses of plants by the tribals of Bastar of Madhya Pradesh. I. Medicinal plants". *Indian J. Appl. Pure Biol.* 2(2): 55–63.
1354. **Oommachan, M. & Masih, S.K. 1988.** "Multifarious uses of plants by the tribal of Madhya Pradesh: Wild edible plants". *J. Trop. Forest.* 4(2): 163–169.
1355. **Oommachan, M. & Masih, S.K. 1989.** "Ethnobotanical observations on certain forest plants of Jabalpur, Madhya Pradesh". *Indian. J. Appl. Pure Biol.* 4(2): 73–78.
1356. **Oommachan, M. & Masih, S.K. 1991.** "Ethnobotanical and conservational aspects of medicinal plants of Madhya Pradesh". *Indian. J. Appl. Pure Biol.* 6(1): 39–44.
1357. **Oommachan, M. & Masih, S.K. 1993.** "Ethnobotanical observations on certain plants of the tribal regions of Madhya Pradesh". *Biome* 6(1): 59–64.
1358. **Oommachan, M., Bajaj, A. & Masih, S.K. 1990.** "Ethnobotanical observations of Pachmarhi (Madhya Pradesh)". *J. Trop. Forest.* 6(2): 157–161.
1359. **Oommachan, M., Masih, S.K. & Shrivastava, J.L. 1989.** "Ethnobotanical studies in certain forest areas of Madhya Pradesh". *J. Trop. Forest.* 5(3): 182–196.
1360. **Oommachan, M., Shrivastava, J.L. & Masih, S.K. 1990.** "Observation on certain plants used in treatments of jaundice". *Indian J. Appl. Pure Biol.* 5(2): 99–102.
1361. **Oudhia, P. 2000.** "Medicinal weeds in kodomillet fields: A source of an additional income for Chhattisgarh farmers". *Ecol. Environm. & Conserv.* 6(2): 171–174.
1362. **Oudhia, P. & Dixit, A. 1994.** "Weeds in Ambikapur region (Madhya Pradesh) and their traditional use". *Weed News* 1(2): 19–21.
1363. **Oudhia, P., Pal, A.R. & Pali, G.P. 2002.** "Traditional medicinal knowledge about common crop weeds in Bagbahera (India) region: A survey". *Agric. Sci. Digest.* 22(1): 53–54.
1364. **Oudhia, P., Tripathi, R.S., Puri, Sunil & Chandel, D.S. 1999.** "Traditional knowledge about medicinal weeds in Chhattisgarh". *Vasundhara, The Earth* 1(1): 12–15.
1365. **Painkra, V.K., Jhariya, M.K. & Raj, A. 2015.** "Assessment of knowledge of medicinal plants and their use in tribal region of Jashpur district of Chhattisgarh, India". *J. Appl. Nat. Sci.* 7(1): 434–442. Abstract: The present study was conducted to assess the knowledge of medicinal plants and their uses in tribal region of Jashpur district of

Chhattisgarh. Under the socio-economic profile, farmers of middle age (36-55 yrs.) people showed the maximum percentage (78%) distribution and frequency, 50 percent of respondents belonged to primary to middle school level of education and 63 percent of respondents were having medium size of family (5 to 8 members). A total of 50 medicinal plants species belonging to 29 families were recorded, in which Euphorbiaceae registered as the largest family with 4 plant species (8%). Shrub showed their maximum presence (34%) followed by tree (32%) and climber (14%). As per knowledge of respondents about medicinal plants Haldi and Bhui-neem is mostly use as medicinal purposes as 5.2% (n=40) followed by Harra, Munga, Karanj and Hadjod (3.9% each). This information through respondent (tribals) showed very diverse nature of medicinal flora, their usage in healing purpose with socioeconomic/ living standard upliftment. Therefore, it is needful aspect of conserving these biological resources for sustainable ecosystem.

1366. **Painuli, R.M. 1992.** *Ethnobotanical studies of the Sahariya tribe of Madhya Pradesh*. Ph.D. Thesis, H.N.B. Garhwal University (Unpublished).
1367. **Painuli, R.M. & Maheshwari, J.K. 1996.** "Some interesting ethnomedicinal plants used by Sahariya tribe of Madhya Pradesh". *J. Econ. Taxon. Bot., Addit. Ser.* 12: 179–185. Abstract: The present paper deals with some interesting ethnomedicinal plants used by Sahariya tribe of Madhya Pradesh, e.g. *Abelmoschus moschatus* Medic., *Azadirachta indica* A. Juss., *Balanites aegyptiaca* (L.) Del., *Cissampelos pareira* L., *Convolvulus arvensis* L., *Momordica dioica* Roxb. etc. The authors conducted ethnobotanical studies of sahariya tribe of M.P. during the year from 1985 to 1991 and collected more than 300 ethnomedicinal plant species belonging to 236 genera and 91 families, along with 35 folklore claims in the treatment of diseases and ailments like abortion, abdominal and cholic pain, asthma and bronchitis, boils, blisters, ulcers, bone fracture, conjunctivitis, cough and cold, diarrhoea, dysentery, jaundice, fever, scorpion stings, spermatorrhoea, etc.
1368. **Pal, D.C. & Banerjee, D.K. 1974.** "A note on the plants used by the tribals in India for hair and scalp preparations". *Adibasi* 15: 28–32.
1369. **Pancholi, A. 2015.** "An ethnobotany of traditional medicinal plants of Neemuch (Madhya Pradesh)". *Fl. & Fauna* 21(1): 115–122.
1370. **Pandey, Aradhna & Oommachan, M. 1992.** "Studies on certain less known wild food plants in rural and tribal areas around Jabalpur". *Indian J. Appl. Pure Biol.* 7(2): 129–136.
1371. **Pandey, A.K. & Shukla, P.K. 2008.** "Role of medicinal plants in health care and rural economy in the tribals of Satpura plateau region of central India". *Indian Forester* 134(11): 1438–1446. Abstract: The Satpura plateau region of central India is home of numerous herb species. The agro-climatic conditions prevailing in the region provides an ideal

habitat for the natural growth of variety of plants, which provide raw materials for pharmaceutical, phytochemical, food, flavouring and cosmetic industries. The paper provides information on 92 medicinal plants used by the Gond, Bharia and Korku tribes of Chhindwara, Betul, Hoshangabad and Seoni district of Madhya Pradesh, India for the treatment of various diseases. Traditional medicine remains an integral part of the health system in this region of central India. Medicinal plants of forest origin hold great promise to enhance the health and source of livelihood to the forest dwellers.

1372. **Pandey, A.K., Patra, A.K. & Shukla, P.K. 2005.** "Medicinal plants in Satpura plateau of Madhya Pradesh: Current status and future prospects". *Indian Forester* 131(7): 857–883. Abstract: Satpura Plateau of Madhya Pradesh with diverse agro-climatic conditions, large biodiversity and strategic geographical location is likely to emerge as a leading producer and supplier of medicinal plants. The paper gives a resume of activities undertaken in recent years by centre for Forestry Research and Human Resource Development, Chhindwara as a part of endeavour towards conserving the medicinal plant wealth and promoting the cultivation of medicinal plant. Training programmes on conservation and cultivation of medicinal plants have also been carried out as apart of Human Resource Development activity. Agrotechniques have been developed for the cultivation of *Abelmoschus moschatus*, *Acorus calamus*, *Andrographis paniculata*, *Rauvolfia serpentina*, *Withania somnifera*, *Cymbopogon flexuosus*, *C. martini* and *Mentha arvensis*.
1373. **Pandey, G., Bajpai, A.K. & Bhatnagar, P. 1991.** "Some unique folk medicines of Baiga tribe of Madla district of Madhya Pradesh". *J. Trop. Forest.* 7(1): 62–66.
1374. **Pandey, G., Singh, V.K. & Bhatnagar, L.S. 1981.** "New records to the medicinal efficiency claims of certain plant records from Gwalior forest circle, Madhya Pradesh— A Preliminary contribution". *Bull. Med.-Ethno-Bot. Res.* 2: 303–315.
1375. **Pandey, P. 2013.** *Phytochemical and antimicrobial studies of some of the medicinal plants of family Apocynaceae*. Ph.D. Thesis, A.P.S. University, Rewa, Madhya Pradesh (Unpublished).
1376. **Pandey, R.K. & Saini, S.K. 2007.** "Edible plants of tropical forests among tribal communities of Madhya Pradesh". *Indian J. Tradit. Knowl.* 6(1): 185–190. Abstract: In Madhya Pradesh, Baiga and Gond tribes are identified as the main collectors and users of forest resources among the forest dwellers. These non-wood forest products (NTFPs) have immense potential to meet the daily requirement of tribal communities and also a source of raw material supply to small pharmaceutical industries. The forest resources of Baiga dominated forest areas of Dindori district of Madhya Pradesh contribute more than 60% of their annual income. Baiga communities collect the maximum forest resources for their subsistence among forest dwelling communities in the world. Many people living in and around forests are unaware of the potential of these resources for income generation because they lack access to information on processing possibilities.

Local people and institutional stakeholders resulting into depletion of resources in natural forests ignore sustainable harvesting of forest resources. An attempt has been made to assess the status of economically important utilizable forest resources in their natural habitats of tropical forests of Dindori and Mandla districts.

1377. **Pandey, R.K. & Shrivastava, J.L. 1989.** "Status survey of indigenous medicinal plants wealth in natural forest from Seoni district of M.P.". *J.Trop. Forest.* 5(III): 206–214.
1378. **Pandey, R.K. & Shrivastava, J.L. 1993.** "Forest and tribal: An ethnobotanical observation on wild medicinal plants used by Bharia tribes of Patalkot in Tamia forest of Madhya Pradesh". *J. Trop. Forest.* 9(3): .
1379. **Pandey, R.K., Bajpai, A.K. & Bhattacharya, P. 1991.** "Some unique folk medicines of Baiga tribes of Mandla district Madhya Pradesh". *J. Trop. Forest.* 7(1): 62–66.
1380. **Pandey, S.N., Dixit, R.S. & Sharma, R.P. 1995.** "Important ayurvedic medicinal plants of Bundelkhand used traditionally". *Bull. Med.-Ethno-Bot. Res.* 16(3-4): 90–98.
1381. **Panwar, N.S., Pradheep, K., Bhatt, K.C. & Deswal, R.P.S. 2014.** "Ethnobotany of a threatened medicinal plant 'Indravan' (*Cucumis callosus*) from central India". *Med. Pl.-Int. J. Phytomed. & Related Industries* 6(4): 307–309.
1382. **Parashar, P. & Solanki, C.M. 2016.** "Ethnoveterinary plants used against mastitis diseases by different tribes of Nimar region Madhya Pradesh". *Int. J. Bot. Stud.* 1(6): 30–32. Abstract: The Nimar region is situated in the southern western part of Madhya Pradesh and covering four districts namely Khargone, Barwani, Khandwa and Burhanpur. The chief tribes of the Nimar regions are Korku, Gond, Nihal, Bhil and Bhilala. Present study deals 19 ethnoveterinary plants species belongs to 15 families and 18 genera used against mastitis disease in cattle. These commonly plants are *Allium cepa* L., *Asparagus racemosus* Willd., *Azadirachta indica* A., *Baccharoides anthelmintica* (L.) Moench., *Capparis zeylanica* L., *Coriandrum sativum* L., *Curcuma amada* Roxb., *Curcuma longa* L., *Datura metel* L., *Dioscorea bulbifera* L., *Gymnosporia montana* Roth, *Indigofera tinctoria* L., *Leonotis nepetifolia* (L.) R. Br., *Moringa oleifera* Lamk., *Nerium indicum* Mill., *Nyctanthes arbor-tristis* L., *Salvadora persica* L., *Vitex negundo* L., *Zingiber officinale* Rosc.
1383. **Parmar, S. 1978.** "A note on folk musical instruments of Madhya Pradesh". *Folklore* 19: 26–27.
1384. **Patel, B. 2012.** "Threatened medicinal flora of Udanti Wildlife Sanctuary, Chhattisgarh". *Indian Forester* 138(7): 610–615. Abstract: Udanti Wildlife Sanctuary is an important protected forest area of Chhattisgarh. The sanctuary is densely covered with rich biodiversity. The exploration of this sanctuary yielded 78 medicinally important plant species belonging to 75 genera, under 35 families. Out of total 78 plants, 24 species have been accesses to be threatened in India. The habit of the threatened plant species were trees, herbs, shrubs and climbers. Major threats to the medicinal flora of the

sanctuary were found to be forest fire and biotic interference.

1385. **Patel, P. & Mahajan, S.K. 2004.** "A note on medico ethnobotany of Vijaygarh (Khargone) Madhya Pradesh". *Bull. Bot. Surv. India* 46(1-4): 398–402. Abstract: Medicoethnobotanical work of Vijaygarh and its neighbourhood is presented. In all, 26 species belonging to 25 genera and 18 families are reported, which are used by the tribals in the treatment of various diseases. Correct identification, local names and plant parts used are mentioned in each case.
1386. **Patel, P.C. 2006.** *Medicinal Plant wealth of Rewa district in Madhya Pradesh with special reference to conservation of few endangered and vulnerable species*. Ph. D. Thesis. A.P.S. University, Rewa. (Unpublished).
1387. **Patel, S., Tiwari, S., Pisalkar, P.S., Mishra, N.K., Naik, R.K. & Khokkar, D. 2015.** "Indigenous processing of *Tikhur* (*Curcuma angustifolia* Roxb.) for the extraction of starch in Bastar, Chhattisgarh". *Indian J. Nat. Prod. & Resources* 6(3): 213–220. Abstract: *Curcuma angustifolia* Roxb., commonly known as Tikhur in Hindi, occurs widely in many parts of India. It is traditionally recognized as medicinal plant and also contains starch in its rhizomes. In some forest tubers, extraction of starch is simple; whereas this is not always so with other tuber starches. An exhaustive survey was conducted in Baster region of Chhattisgarh to explore the traditional practice of extraction of starch from Tikhur rhizomes being followed by the tribals/ forest dwellers and to document the same. Information was documented by Participatory Rural Appraisal (PRA) technique followed by live demonstration of the actual methodology. The paper discusses, various unit operations essential in the extraction of starch from Tikhur rhizomes. Efforts have also been made to record the traditional knowledge of ethnic people in relation to Tikhur starch preparation with due justification and practical implications. The purpose of the investigation was also to provide protection to the knowledge of forest dwellers and document it before it is lost under the onslaught of development process. The knowledge would help researchers, scientists and development workers in adding value to the indigenous knowledge for sustainable development.
1388. **Pateriya, V., Agrawal, P. & Tiwari, B. 2013.** "Ethnomedicinal plants as natural remedies in Chatarpur district of Madhya Pradesh". *Int. J. Agric.* 9(1): 376–378.
1389. **Pathak, A., Singh, A. & Singh, A.P. 2011.** "Ethnomedicinal uses of pteridophytes of Vindhyan region (M.P.)". *Int. J. Pharm. Life Sci.* 2(1): 496–498. Abstract: Pteridophytic flora is the extinct members of plants groups used medicinally by aboriginals. These plants have been used as such for various purposes as fodder vegetable & medicinal purpose. The Vindhya valley has a lot of pteridophytes which are even very common and frequently grown in association with the members of the angiospermic plants. The study has been conducted to assess the frequency of these pteridophytic members in the

various spots Kymore hills of Vindhyan region. Their conservation is urgently required. The study would be very helpful to know the responsible factor of the region, which are responsible for the extinction of the species from the region. The dry climate, less precipitation & humidity with low nitrogen content of the area significantly destroy thepteridophytic vegetation of the area.

1390. **Pathak, K., Athaya, C.D., Bajpai, S.P. & Tiwari, P.K. 2005.** "Ethnobotanical observations on some forest trees of Naoradehi Wild Life Sanctuary of Sagar (M.P.)". *J. Bot. Soc. Univ. Sagar* 41:11–15. Abstract: The Naoradehi Wild Life Sanctuary (NWLS) is the unique wild life sanctuary of Sagar, Madhya Pradesh which is rich in its floristic diversity and bioresources. The forest stands of this area have brought some interesting plants with new uses for treating various diseases and disorders. The present paper deals with ethnomedicinal investigations of 20 tree species which are used by the people folk. Along with their botanical names, local names, family and habits, the plant parts used in traditional medicine have been also evaluated. Investigations regarding seasonal variations in phenological cycles of trees provide a basic knowledge to layman to collect the plant parts in different medicinal uses.
1391. **Pathak, V.M. 1926.** *Medicinal plants of Gwalior*. Gwalior.
1392. **Pathan, Mohammad, F., Sanghi, S.B. & Shah, K.W. 2013.** "Medicinal plants used by tribals of Raigarh district (M.P.) for epilepsy". *Indian J. Appl. Pure Biol.* 28(2): 291–295. Abstract: A survey of medicinal plants of Rajgarh District has been carried out with co-operation of Vaidyas and tribal villagers. During study 14 medicinal plant species belonging to 11 families have been identified for the treatment of epilepsy Herbarium has been prepared which contains information pertaining to botanical name, local name, parts used, dose and mode of administration.
1393. **Patil, U.S. & Deshmukh, O.S. 2015.** "Plants used in ethnoveterinary medicines by tribal people in Betul district, Madhya Pradesh, India". *J. Global Biosci.*4(8): 3049–3054. Abstract: The paper highlights some commonly used ethnoveterinary medicines for domestic animals to treat ailment. The data was gathered from ethnic people specially Gond and Korku in the tribal pockets of Betul district. A total 25 species belonging to 25 genera, representing to 19 families as employed for 14 types of animal diseases. The species, family and vernacular name, plant part(s), drug preparation, mode of administration are studied.
1394. **Patil, U.S. & Deshmukh, O.S. 2015.** "Traditional ethnoveterinary practices in Betul district (M.P.) India". *Int. J. Curr. Res. Life Sci.* 4(10): 423–428. Abstract: The present communication deals with the documentation of Ethno-veterinary medicinal plants used by the traditional healers in Betul district, Madhya Pradesh, India. Ethno veterinary information was gathered through individual interviews and observations among the tribal peoples of study area. A total of 41 species of Ethnoveterinary medicinal plants

belongs to 32 families and 41 genera were recorded in the study with the help of Sixteen Ethno veterinary traditional healers. This information suggests the documentation of the medicinal plants and associated indigenous knowledge can be used for conservation and sustainable use of medicinal plants in the area and for validation of these plant preparations for veterinary treatment.

1395. **Pradhan, Adikant, Nag, S.K. & Patil, S.K. 2011.** "Traditional fishing techniques of tribes in Bastar region of Chhattisgarh". *Indian J. Tradit. Knowl.* 10(2): 386–387. Abstract: Tribal habitant and rich primitive culture covers many tradition and fish is an integral part of tribes' food habit since time immemorial for the region. The lives of tribes mainly depend on naturally` available foods which can rarely be reaped in other places. Participatory research tools such as group discussion, semi-structured interviews, key informant survey and on-site observation were taken to acquire the fish harvesting practices followed by tribes. During rainy season, many types of fishing net, fishing gears, bamboo frame, etc. are commonly used in running as well as stagged water. These are locally known as Jali, Gari, Pelna, Thapa, Bisar, Dandar, Sodiya, etc. with widely adopted in small to large flow of water for individual to collective form of fishes.
1396. **Prajapati, R.S., Richhariya, G.P., Singh, R., Tripathi, I.P. & Tripathi, M. 2015.** "Ethno-veterinary medicines and practices prevalent among tribal and rural communities of Chitrakoot, district Satna". *Life Sci. Bull.* 12(2): 151–154. Abstract: Millions of people have keep an intimate relationship with their livestock and depend on their for food, clothing, labour, fertilizers and cash. Animals are a vital part of our culture and many religious societies are regarded as equal to humans. The present communication deals with the systematic survey and documentation of ethnoveterinary medicinal plants used by the tribal and rural communities of Chitrakoot, Satna district (M.P.), with the help of standard questanarries. Information was collected from traditional practitioners, vaidyas, community leaders, knowledgeable men and women during February 2014 – January, 2015. The survey was conducted on 20 villages of tribal dominant of Chitrakoot region with 120 field trips in different seasons. Present study of 35 plants species have been found used to treat the livestock for curing several diseases by villagers.
1397. **Prana, Ishwar Chandra & AHIRWAR, Ramesh Kumar 2015.** "Socio-economic importance of some plants species used by the tribes of Chanda Forest District Dindori Madhya Pradesh, India". *Int. J. Sci. & Res.* 4(3): 1733–1735. Abstract: The paper highlighted of some important ethnomedicinal plants which are used in various disease by the tribals of district Dindori Madhya Pradesh. The rural and the tribal folk form majority of the population of district and most of them are economically backward. Some steps are needed for the economic upliftment of these backward people which will not require major monetary input or skilled labour. The most easy and adaptable mode of employment is the gainful exploitation of plants and plant products available in the

vicinity for their economic betterment.

1398. **Prana, Ishwar Chandra, Ahirwar, Ramesh Kumar & Singh, G.K. 2014.** "Traditional medicinal knowledge about some herbaceous plants used by Baiga tribes of Bajag Forest, district Dindori Madhya Pradesh India". *Int. J. Sci. & Res.* 3(12): 2232–2236. Abstract: The present study on Traditional Medicinal plants diversity was carried out at Bajag Forest, District Dindori, Madhya Pradesh. The study was mainly focused on the Medicinal plants uses of Baiga Tribes treatment of various ailments by the nearby village inhabitants. The information was collected by questionnaire and consulting local Baiga Tribes. In this study was entirely focused on revealing the Medicinal potential possessed by the plants growing wild in this area and their sustainability for better of main kind.
1399. **Prasad, R.& Pandey, R.K. 1987.** "Medicinal wealth of central India: I. Potential of indigenous medicinal plants of Eastern Madhya Pradesh". *J. Trop. Forest.* 2(4): 287–289.
1400. **Quamar, M.F. & Bera, S.K. 2014.** "Ethno-Medico-Botanical studies of plant resources of Hoshangabad district, Madhya Pradesh, India: Retrospect and Prospects". *J. Pl. Sci. Res.* 1(1): 101–111. Abstract: The present communication reports the folk medicinal uses of plants by the tribes of Hoshangabad District, Madhya Pradesh (India), which are therapeutically used against different ailments of human being as well as the livestock. In all, 179 plant species comprising 47 trees, 36 shrubs/undershrubs, 74 herbs, 21 climbers and 1 liana belonging to 76 families, used by the tribal people, have been enumerated and discussed, which signifies the ethnomedicinal values of plant species occur in the study area. The study, thus, highlights the potential of ethnobotanical research and the need for documentation of traditional knowledge pertaining to the utilization of plants as medicine. Pharmacological analysis is obligatory in order to authenticate their accuracy and future prospects in the drug development with due benefit-sharing with the primary stakeholders for the greater advantage of mankind in the study area. The study could play a significant role in resolving the controversies pertaining to biopiracy and Intellectual Property Rights.
1401. **Rai, B.K. & Rai, A. 1992.** "Use of fungus in folk medicine for family planning among Baiga". *Folklore* 33:65.
1402. **Rai, B.K., Ayachi, S.S. & Rai, A. 1996.** "A note on ethnomedicines from Central India". *J. Econ. Taxon. Bot., Addit. Ser.* 12: 186–191. Abstract: Ethnomedicinal uses of ten fungi viz., *Astraeus hygrometricus*, *Agaricus* sp., *Calvatia cyathiformis*, *Cyathus stercoreus*, *C. limbatus*, *Lycoperdon pusillum*, *Microporus xanthopus*, *Phallus rubicundus*, *Termitomyces microcarpus* and *Xylaria polymorpha* practised by Baiga and Bharia tribes of central India have been dealt in the present paper. Mode of preparation of doses for different diseases among these tribes are also described in details.
1403. **Rai, M.K. 1985.** "Plants used as medicine by tribals of Chhindwara district (Madhya



- Pradesh)". *J. Econ Taxon. Bot.* 7(2): 385–387. Abstract: An ethno-botanical survey was carried out amongst Gond, Korku, Pardhan and Bharia tribes of Chhindwara district, with special reference to Patalkot and Tamiya region to collect information on the traditional uses of medicinal plants. The medicinal property of the concerning plants are being given in the present paper.
1404. **Rai, M.K. 1987.** "Ethno-medical studies of Patalkot and Tamiya (Distt. Chhindwara) M.P.– Plants used as tonic". *Ancient Sci. Life* 7(2): 119–121. Abstract: An ethno-medical survey was conducted in the tribal pockets of Tamiya and Patalkot of Madhya Pradesh wherein "Bharia" and "Gond" tribes inhabit. This paper presents 22 medicinal plants belonging to 17 families, used as tonic medicine among them.
1405. **Rai, M.K. 1987.** "Studies on ethnomedicinal plants of Chhindwara district, Madhya Pradesh- . Plants used against rheumatism". *J. Econ. Taxon. Bot.* 11(2): 469–470. Abstract: In the present paper, the author has described sixteen medicinal plants which is a result of through survey of ethno-medicinal plants used by 'Gond' and 'Bharia' tribes against rheumatism.
1406. **Rai, M.K. 1988.** "Ethnomedicinal survey of Patalkot and Tamiya (District Chhindwara)– 1. Plants used against skin diseases and liver disorders". *J. Econ. Taxon. Bot.* 12(2): 337–339. Abstract: In the present paper, 27 plants used by Bharia and Gond tribes of Patalkot and Tamiya are being described. Out of these plants, 21 plants are used against skin diseases whereas 6 plants are used in liver disorders.
1407. **Rai, M.K. 1992.** "Plants used by tribal of Seoni district". *J. Econ. Taxon. Bot., Addit. Ser.* 10: 281–283. Abstract: In the present paper, the author has given a list of edible and other useful plants and their products which is a thorough survey of people of Gond tribes of Seoni district, Madhya Pradesh.
1408. **Rai, M.K. 1993.** "A note on ethnomedicinal studies of Chhindwara plants used in snake and scorpion bite". *Aryavaidyan* 7(1): 48–50.
1409. **Rai, M.K. & Nonhare, B.P. 1992.** "Ethnomedicinal studies of Bichhua (Distt. Chhindwara) Madhya Pradesh". *Indian Med.* 4(3): 7–10.
1410. **Rai, M.K. & Nonhare, B.P. 1994.** Ethnomedicinal studies of Bichhua, district Chhindwara, M.P. In: Gupta, B.K. (Ed.), *Higher Plants of Indian Subcontinent*. Vol. III (*Indian J. Forest., Addit. Ser.* VI). Bishen Singh Mahendra Pal Singh, Dehra Dun. Pp. 243–262. Abstract: 50 medicinal plants represented by 32 families and 46 genera were recorded from Bichhua, chhindwara district of Madhya Pradesh during the present investigation. These plants are used by the local tribes for gastrointestinal problems, urinary disorders, oral infections etc.
1411. **Rai, M.K. & Ojha, G.C. 1989.** "Ethnomedicinal studies of Chhindwara district, Madhya Pradesh. Plants used in stomach disorders". *Indian Med.* 1(2): 1–5.

1412. **Rai, M.K. & Pandey, A.K. 1997.** "Folk medicines of Gond tribe of Seoni district, M.P., India". *J. Non-Timber Forest Prod.* 4 (1/2): 61–69. Abstract: Gond, a major tribe of Madhya Pradesh, resides in Seoni district too. The present study incorporates the ethnomedicinal survey of 54 medicinal plants used by Gond tribes in various ailments. Periodical field trips were conducted in tribal villages in the year 1994-1995 to collect information on plants used by the Gond tribe. The information was collected after discussion with local medicine men, vaidhyas and other experienced villagers.
1413. **Rai, M.K. & Upadhyay, S.K. 1997.** "Phytotherapy of skin disease by plants of Patalkot and Tamiya". *Ancient Sci. Life* 16(4): 337–346. Abstract: The authors reports in this paper the usefulness of some plants of Chindawara, Madhya Pradesh in curing superficial mycosis.
1414. **Rai, M.K. & Upadhyay, S.K. 1997.** "Folk medicine of Gond tribe of Seoni district, Madhya Pradesh, India". *J. Non-Timber Forest Prod.* 4(1-2): 61–69.
1415. **Rai, M.K., Pandey, A.K. & Acharya, D.2000.** "Ethno-medicinal plants used by Gond tribe of Bhanadehi, district Chhindwara, Madhya Pradesh". *J. Non-Timber Forest Prod.* 7(3/4): 237–241. Abstract: Ethnomedicinal surveys on traditional uses of medicinal plants by Gond tribe of Bhanadehi, District Chhindwara were made during 1997 to 1998. In all 32 plants were reported which were used by Gond tribe and other village people in various ailments. Such plants include *Acorus calamus*, *Argemone mexicana*, *Asparagus racemosus*, *Azadirachta indica*, *Berberis aristata*, *Butea frondosa*, *Caesalpinia bonducella*, *Calotropis procera*, *Cassia tora*, *Cissampelos pareira*, *Citrullus aromaticus*, *Costus speciosus*, *Cocculus hirsutus*, *Cuscuta reflexa*, *Embllica officinalis*, *Mangifera indica*, *Moringa oleifera*, *Mucuna prurita*, *Ocimum sanctum*, *Plumbago zeylanica*, *Pterocarpus marsupium*, *Ruta graveolens*, *Semecarpus anacardium*, *Solanum anguivi*, *S. melongena var. incarnum*, *Syzygium cumini*, *Terminalia arjuna*, *T. bellerica*, *T. chebula*, *Thymusserphyllum*, *Tinospora cordifolia*, *Verbascum thepsus*. The chemical constituents of the respective plants is also given in the present paper. So far, there is no report of ethnomedicinal plants from Bhanadehi thus representing the first report from the area.
1416. **Rai, Rajib.2002.**"Ethnomedicinal studies on Bhariya tribes in Satpura plateau of Madhya Pradesh". *Agriculturists* 13(1&2): 109–114.
1417. **Rai, Rajib.2006.** "Traditional uses of genus *Curcuma* in folk medicines prevalent in Central India". *Indian J. Trop. Biodiv.*14(2): 153–159.
1418. **Rai, Rajiv. 2006.** "Transfer of technology on medicinal and aromatic plants in Central India by extension agencies - A case study". *J. Trop. Forest.* 22(1&2): 17–28. Abstract: The paper describes that the challenges in forestry sector for sustainable management of forests in central India are conservation of biological diversity, increase in forest cover and utilization of herbal, medicinal and aromatic plants. The approaches prevalent in transfer of technology to end users in Chhattisgarh state are individual contact, group

contact and mass contact. Any technology, when introduced in a new area, takes lot of time in diffusion, although when it is introduced by resource person to the innovator, it is adopted within a short span of time. But the diffusion takes few months to several years in adoption of technology by majority of community residing in that particular locality. About 32% of the end-users were disseminated technology by individual approaches such as Field and Home visit, followed by group contact approach where Friends and Neighbours disseminated technology to about. 29% of the end-users and by mass approach in Van-Mela organized by JFM societies in which technology was disseminated to about 37% of the end-users. The paper describes the technologies evolved for cure of illnesses such as cold, cough, cold with cough, cold with fever, cold followed by cough and fever using herbal plants in different formulations by traditional healers and their dissemination by various extension agencies to the end-users. The adoption of technologies by end-users has been graphically presented in the paper. The graphs depict that the entire tribal community, which is dependent on forest, is not utilizing the medicinal and aromatic plants although they are living in forest for several hundreds of years. The study suggests investigation to be carried out on utilization pattern of such herbal, medicinal and aromatic plants for their sustainable utilization and conservation.

1419. **Rai, Rajib.2007.** "Some traditional plants used in cold, cough & fever by tribals of Bastar (Chhattisgarh)". *Indian J. Bot. Sci.* 86(1&2): 27–36.
1420. **Rai, Rajib.2008.** Herbal medicines in cure of prevalent diseases in tribal pockets of Madhya Pradesh. In: Trivedi, P.C. (Ed.), *Indiam Medicinal Plants*. Aavishkar Publishers & Distributers, Jaipur. Pp. 175–183.
1421. **Rai, Rajib.2008.** Herbal plants in ethnomedicinal uses by Bhardwaj tribes in Satpura plateau of Madhya Pradesh. In: Trivedi, P.C. (Ed.), *Indiam Medicinal Plants*. Aavishkar Publishers & Distributers, Jaipur. Pp. 196–211.
1422. **Rai, Rajib.2008.** "Indigenous and herbal medicines prevalent among tribal communities in Madhya Pradesh". *J. Non-Timber Forest Prod.*15(3): 183–191. Abstract: Extensive survey and field trips conducted in different seasons for a period of two years during year 2004-2006, in the selected tribal pockets inhabited by Baiga, Bhariya, Bhil, Bhilala, Gond, Korku, Kol and Pardhi tribes in the districts of Bhopal, Sehore, Chhindwara, Betul, Seoni, Mandla and Dindori and Hoshangabad resulted in recording ethno-medicinal uses of 40 plant species. The tribal communities are preparing different formulations from these 40 plant species and their parts used in cure of ailments such as anti-diabetic, as carminative to check flatulence, cure of tumor, diarrhoea, baldness, eliminate impotency and sexual weakness.
1423. **Rai, Rajib.2008.** "Tribes and their indigenous knowledge on wild plants used as food and their medicinal uses in Madhya Pradesh". *J. Non-Timber Forest Prod.*15(4): 255–263. Abstract: There are 227 ethnic communities found in our country, belong to 573

tribal communities out of which 28 tribal communities are found in Madhya Pradesh. The state has five primitive tribes such as Baiga, Bhariya, Korku, Bhilala and Sahariya, besides other prominent tribes like Kol, Bhil, Gond, Pao, Pardhi, Khairwar, Maria and Mina. The tribal population constitutes 19.9% of the state's population. The present study was carried out during the period 2003-2006 in the selected tribal villages of Baiga, Bhariya, Bhilala, Bhil, Gond, Korku and Pardhi tribes in Madhya Pradesh, to record wild plants used by different tribal communities for edible purpose and prevalent in indigenous traditional knowledge used in folk-medicines. The paper gives scientific name of wild plants along with authority, their local names, family, plant part used and remedial measures used by different tribal communities. The study concludes that different tribes use different plants for cure of some ailments.

1424. **Rai, Rajiv. 2009.** "Lesser known ethno-medicinal uses of tree species in Madhya Pradesh". *J. Trop. Forest.* 25(3&4): 50–58. Abstract: Tribals and aboriginals reside mostly in the areas inside or adjoining forests in isolation but in harmony with nature. They have unique understanding of the forest resources and pass on information from one generation to another. Tribals living in forest fringes are largely dependent on forest for food, fodder, shelter, medicines and for meeting out their social and livelihood needs. In the present study, lesser known medicinal uses of tree species in tribes such as Baiga, Bhariya, Birhor, Bhil, Bhilala, Gond, Korku, Kol and Pardhi were documented from twenty two tree species used in cure of ailments such as eczema, itching, scabies, headache, body pain, bone fracture, boils and sores, diabetes, jaundice, hair fall, baldness, rheumatic pain, paralysis, diarrhoea, dysentery and snake bite. The study concluded that tribes in the state of Madhya Pradesh have immense knowledge about medicinal values of plants and trees found in the forests and are dependent on forest for their primary health needs. The information recorded from tribal communities of different localities needs to be scientifically and systematically documented before it is lost on account of rapid changes occurring in tribal culture and decline in number of persons having aptitude towards indigenous knowledge, due to changing socio-economic profile of tribals.
1425. **Rai, Rajiv. 2012.** "Ethnobotanical studies on Korku tribes of Madhya Pradesh". *Forestry Bull. ENVIS* 12(2): 86–93. Abstract: The utilization of 40 medicinal plants have been recorded during field survey which revealed different uses of plant parts with formulations being used by Korku-Pardhi tribe in cure of ailments such as anti-diabetic, cure of tumor and cancer, as carminative to check flatulence, diarrhoea, to check baldness, to eliminate impotency and sexual weakness. The present investigation focuses on use of medicinal plants by tribal communities in cure of various ailments. Such plants need to be examined for phyto-chemical studies to know active ingredient and chemical compound present in them which are beneficial in cure of ailments.
1426. **Rai, Rajiv. 2013.** "Ethno-medicinal studies in cure of ailments in Baiga Tribes in Madhya

Pradesh". *J. Trop. Forest.* 29(1&2): 33–41. Abstract: Several ethnomedicinal studies have been taken during last three decades to document indigenous knowledge of ethnic communities. Madhya Pradesh state is home of 28 ethnic communities spread across the state. The present paper deals with ethno- medicinal studies of Baiga tribes, a primitive tribe of Madhya Pradesh. The tribe has good knowledge on medicinal values of native flora found around their habitat. The study was conducted in tribal belts of Gondwana region of Baiga tribe, which lies between latitude 17°48' N and 26°52' N and between longitude 74°2' E to 84°24' E in pockets of Jabalpur, Katni, Sidhi, Shahdol, Betul, Seoni, Mandla and Dindori in state of Madhya Pradesh. Extensive field trips were conducted in different seasons in each quarter during years 2004 - 2006 in selected pockets of Baiga tribe. Villages were surveyed in Gondwana belts for recording floristic diversity and their ethno-medicinal uses. During the visit a rapport was made with a number of elderly persons of tribal communities and traditional herbal healers to collect the information. The information recorded in field were further screened in laboratory as per work pertaining to Indian ethno-botany and plants recorded by Chopra *et al.* (1965), Chopra *et al.* (1982), Nadkarni (1982), Kapur (1990), Jain (1981 & 1991), Jain (1996) & Sathpathy and Panda (1992). The study revealed 21 plants belonging to 17 genera and 14 families have been widely used in cure of diarrhoea, dysentery, bone fracture, jaundice, rheumatic pain, ease in delivery, arthritis, colic pain, plies, ulcers, cuts and wounds, malarial fever, asthma and, tuberculosis utilizing rhizomes, seeds, bark, leaves, roots and fruits, in formulation such as powder, paste, extracts which have been discussed in the paper.

1427. **Rai, Rajib. 2016.** "Herbal folk remedies in cure of arthritis by ethnic communities in Madhya Pradesh, India". *Asian J. Res. Pharma. Sci.* 6(3): 177–184. Abstract: The study was conducted in pockets of Madhya Pradesh having predominance of ethnic communities comprising of Gond, Baiga, Bediya, Bhil, Bhilala, Bhariya, Korku, Pardhi Kol, Mawasi, Patni (sub- group of Gond tribes) and Padwania (Sub group of Kol tribes) tribes, in districts of Jabalpur, Seoni, Hoshangabad and Chindwara to document plants prevalent in cure of Arthritis. Arthritis is the most common disease causing intolerable pain and inflammation due to abnormal metabolism of uric acid, which are deposited in the cartilage of joints with frequent pains and swelling of joints. The present investigation was carried out in the state of Madhya Pradesh, India during period 2013 September to 2016 February. The study was conducted by interviews and focus group discussions with local indigenous communities. During the visits a number of traditional herbal healers, elderly person of tribal communities, were contacted and information was collected through interview, observations and discussion held during field survey. The local traditional herbal healers (vaid) had specialized knowledge about availability of these plants (trees, shrubs, herbs, and climbers) as well as their seasonal availability, time of

collection and collected roots, leaves, seeds and fruits in cure of ailments known as arthritis and prepared different herbal formulations which varied from locality to locality and one ethnic community to other. The study revealed that plants from 32 genera comprising of 22 plant families with 22 prescriptions of herbal folk medicines were prevalent among different ethnic communities as documented from 18 Indigenous and traditional healers locally known as Vaidraj. These vaidraj used different prescription in different pockets within the tribal community as well as varied from one ethnic community to another based on species in abundance in forest and around forest fringes of their habitat. They used to collect roots, leaves, seeds, fruits, bark and rhizomes and were formulating powder, paste, extract, decoction, juice and oil and were administered on patients suffering from pain in order to cure ailment called as Arthritis. These elderly folk healers as well as members of ethnic communities had vast knowledge about these plants, mode of administration of dose and were using these information since several generations. But during the survey it was revealed that among the younger generation this vital knowledge was declining gradually. The study concludes that herbal folk medicines have been recognised as of great importance in primary health care of ethnic communities across the globe. Plant based traditional knowledge is being used as a tool for search for new sources of drugs in herbal medicines.

1428. **Rai, Rajib. 2016.** "Traditional indigenous knowledge prevalent in folk herbal medicines in cure of various pains in Chhatarpur district, Madhya Pradesh, India". *J. Non-Timber Forest Prod.* 23(3): 143–149. Abstract: The paper enumerates seventeen plant species used by tribals in Chhatarpur district of Madhya Pradesh. The roots, leaves, fruits and seeds, in cure of pains such as addomen pain, body swelling and pain, joint pain, liver swelling and pain, migraine, neck pain, stomach pain and wound with body swelling. These species are prevalent among local communities as Gond, Bediya, Bhil and Kol tribes using from root, stem, leaf, fruit and seed and formulations prepared as powder, paste, oil, leaf extract and powder, fruit and seed powder.
1429. **Rai, Rajib. 2016.** "Ethnomedicinal uses of promising plants in various formulations in cure of ailments in Chhindwara district, Madhya Pradesh". *Pharm. & Pharmacol. Int. J.* 4(7):483–486. Abstract: Many plants play a vital role in primary health care in lives of rural people as they possess therapeutic properties. The present study had been conducted in Chhindwara district in state of Madhya Pradesh to document ethno medicinal uses of 50 species of plants, comprising of 41 genera and 27 families prevalent in six cluster of villages of tribal communities residing in Batkakhapa, Chhind, Haarai, Junardeo, Patalkot and Rated in cure of ailments such as leucoderma, sun-stroke, skin burn, skin disease, boils, baldness and hair problems, male and female impotency, leucorrhoea, lactation, heart ailments, blood pressure, diabetes, intestinal worms, scorpion sting, snake bite, jaundice, fracture and loss of appetite. The tribal community uses various formulations

such as, powder, paste, decoction, oil, juice, pulp and raw material etc. of root, bulb, tuber, seed, leaves, fruits of plant species, as being used by local inhabitants based upon local traditions which are vanishing among Bhariya and Gond tribes. This highly valuable knowledge being scattered, secretive, fast eroding prior to vanish needs proper documentation. This continuous erosion of this vital knowledge had renewed the interest and development of medicinal plant sector in India specially the state of Madhya Pradesh which has enormous amount of dense forest. The paper concludes that ethnic communities had vital knowledge on indigenous uses of medicinal plants utilizing various formulations in cure of various ailments.

1430. **Rai, Rajiv.2017.** "Ethno-medicinal studies in pockets inhabited by Baiga Tribe in Madhya Pradesh". *J. Trop. Forest.* 33(1): 50–61. Abstract: A number of ethno-medicinal studies have been conducted during the last 2-3 decades to document indigenous knowledge of various ethnic communities. Madhya Pradesh state is home to 28 ethnic communities spread over across the state. The present paper deals with ethno-medicinal studies of Baiga tribe, a primitive tribe of Madhya Pradesh. The tribal people have good knowledge on medicinal values of native flora found around their habitat. The present study was conducted in tribal belt of Gondwana region which lies between latitude 17°48'N and 26°52' N and between longitude 74°22' E to 84°24' E in Baiga tribe inhabited pockets in the districts of Jabalpur, Katni, Umariya, Sidhi, Shahdol, Anuppur, Betul, Seoni, Mandla and Dindori in the state of Madhya Pradesh. Extensive field trips were conducted in different seasons during years 2004 - 2006 in selected Baiga-inhabited villages in the study area. Rapid roving survey method was adopted for recording floristic diversity and its ethno-medicinal uses. During the visits, a rapport was made with a number of elderly persons of tribal communities and traditional herbal healers who were contacted and interviewed to collect the information. The information recorded in field was further screened as per the works pertaining to Indian ethno-botany and plants recorded during the study revealed that 21 plants belonging to 17 genera and 14 families are widely used in cure of diarrhoea, dysentery, bone fracture, jaundice, rheumatic pain, arthritis, colic pain, piles, ulcers, cuts and wounds, malarial fever, asthma and tuberculosis and also for use at the time of delivery during child birth utilizing rhizomes, seeds, bark, leaves, roots and fruits, and in formulations such as powder, paste and extract which have been discussed in the paper.
1431. **Rai, Rajiv.2017.** "Ethno-medicinal uses of plants in folk medicines for dysentery in tribal inhabited areas of Central and East-Central Indian States". *J. Trop. Forest.* 33(3): 12–25. Abstract: Dysentery is an inflammatory disorder of the intestine, especially the inflammation of colon region. It is a very common and sometimes fatal disease in tropical regions of the world where sanitary and hygienic conditions are poor. It takes a very heavy toll every year in tribal inhabited areas in the central and east-central Indian

states of Madhya Pradesh, Chhattisgarh and Jharkhand. These three states are among the forested and tribal dominated states of the country. Tribals inhabiting in this tract have since times immemorial, been exclusively depending on herbal folk medicines made of locally occurring wild medicinal plants for curing their various ailments. A study was undertaken during the period from the year 2004 to 2009 to document ethno-medicinal uses of plants in the cure of dysentery. For this study, 6 localities viz., Kesla, Shobhapur, Tawa Nagar, Sohagpur, Bankhedi and Bori in Hoshangabad district of Madhya Pradesh; 5 localities viz. Kondagaon, Koylibeda, Makdi, Keshkal and ChhoteDongar in the then undivided district of Bastar in Chhattisgarh; 2 localities viz., Ramgarh and Barkakhana in Ramgarh district and 3 localities viz., Lalgutwa, Silli and Ormajhi in Ranchi district of Jharkhand were selected for the survey and documentation. The study covered 7 tribes viz., Korkus, Pardhis, Muriyas, Bhatras, Mundas, Birhors and Oraons. During, this study, a total of 1025 persons was interviewed. Out of these 1025 persons, 675 (65.85%) persons were reported having been affected with dysentery and of them, 479 persons (70.96%) were reportedly cured from the treatment of folk medicines. The study further revealed that different tribal communities residing in different regions have evolved their own different folk medicines for the same disease, made of plant parts of the medicinal plant species naturally occurring in their areas. During the survey, barks of *Acacianilotica*, *Terminaliaarjuna* and *Holarrhenaantidysenterica*; fruits of *Aeglemarmelos* and *Terminaliabellirica*; bulbs of *Alliumcepa*, roots of *Asparagusreemosus*, *Euphorbiaprostrata*, *Helicteresisora*, *Nyctanthesarbortristis*, *Smilaxzeylanica* and *Tinosporacordifolia*, leaves of *Ecliptaalba* and *Ocimumsanctum*, seeds of *Plantagoovata* and whole plants of *Centellaasiatica* were reported to have been used in the preparation of folk medicines for dysentery. The formulations included powder, pulp, paste, decoction, juice, husk and gum. The above-mentioned 16 plant species belong to 13 different families. The observations recorded during the survey are presented and discussed in this article. The information compiled and documented includes the botanical names, local names, families, plant parts used, methods of preparing formulations, recommended doses and methods of administering the medicines, along with the names of the localities and tribes concerned.

1432. **Rai, Rajib. 2017.** "Promising medicinal plants their plants and formulations prevalent in folk medicines among ethnic communities in Madhya Pradesh, India". *Pharm. & Pharmacol. Int. J.* 5(3): 99–106. Abstract: India is a repository of medicinal plants rich in herbal treasure and floristic wealth. Plants are being used since ancient times as a source of drugs as depicted from Indian ancient Hindu scriptures like Rigveda (4500-1600 BC), Charak Samhita (1000-800 BC), Sushrut Samhita (800-700 BC). The medicinal plants play an important role in folk-medicines among 104.2 million ethnic communities inhabited in 5000 villages in India where no such modern facilities of hospitals exists, and also plays a significant role in socio-cultural, spiritual, health needs of communities, across



the globe in developing and developed countries. Gradually, 85% of the herbal and folk-medicines are derived from plants on which 4.3 billion people rely, across the globe. In Indian sub-continent folk-medicines are still prevalent among 25.2% of ethnic community in Madhya Pradesh are inhabited in 15% of the total geographical population of the country, who had accumulated a great amount of knowledge on use of plants. The paper precisely depicts some of the promising plants prevalent in Ethnic pockets viz. Chhatarpur, Satna, Jabalpur, Seoni, Chhindwara and Hoshanagabad districts in Madhya Pradesh in India.

1433. **Rai, Rajib. 2017.** "Indigenous herbal medicines in cure of ailments prevalent among Bhariya and Gond tribes in Chhindwara district, Madhya Pradesh". *J. Non-timber Forest Prod.* 24(1): 59–68. Abstract: The paper enumerates fifty plant species used by tribal's in Chhindwara district of Madhya Pradesh along with parts of plant species, the formulations and doses as prevalent in cure of leucoderma, eczema, sun-stroke, sun burn, baldness, boils, female and male impotency, heart ailments, blood pressure, diabetes, intestinal worms, snake bite, scorpion sting, jaundice, fracture and loss of appetite.
1434. **Rai, Rajib & Nath, V. 2005.** "Use of medicinal plants by traditional herbal healers in central India". *Indian Forester* 131(3): 463–468. Abstract: It has been realised in the modern world that herbal drugs strengthen the body system specifically and selectively without side effects. Traditional herbal medicine system has now gained importance in developed countries. The herbal medicinal practices adopted by traditional healers in central India for cure of various diseases occurring in tribal pockets are presented in this paper.
1435. **Rai, Rajiv & Nath, V. 2005.** "Some lesser known oral herbal contraceptives in folk claim in Bastar region of Chhattisgarh". *J. Nat. Remedies* 5(2): 153–159.
1436. **Rai, Rajiv & Nath, V. 2006.** Use of indigenous herbal medicinal plants by Gond traditional healers in cure of skin diseases in Bastar region of Chhattisgarh. In: Trivedi, P.C. (Ed). *Medicinal plants: Traditional knowledge*. Pp. 229–235. I.K. International, New Delhi.
1437. **Rai, Rajiv & Nath, V. 2006.** "Socio-economic and livelihood pattern of ethnic group Baiga in Achanakmar Sal Reserve Forest in Bilaspur Chhattisgarh". *J. Trop. Forest.* 22(3&4): 62–70. Abstract: The paper presents studies on socio - economic and livelihood pattern of Baiga tribe found in Sal forests of Bilaspur district in Chhattisgarh state. The study was conducted in Achanakmar which has predominance of Sal forest with large number of undershrubs and shrubs. In India, Sal forests cover about 11-12 million ha. area representing 14-16 per cent of the total forest area of the country. Sal forests, in Chhattisgarh state occur in Bilaspur, Durg, Raigadh, Raipur and Sarguja and in some pockets of Korea, Jashpur and Bastar also. Chhattisgarh state has large diversity among

ethnic groups. The present study has been conducted in tribal pocket of Achanakmar in Bilaspur district. In this pocket there is predominance of Agariya, Angh, Baiga, Bhumiya, Bhilala, and Gond tribes. The study is mainly concentrated, in tribal pockets of Baiga tribes. The tribal community living in Chhattisgarh state has immense knowledge about plant wealth. This knowledge has been documented in the present study. The information was collected through PRA techniques from the Baiga tribe. Baigas have been living in forest fringes in Achanakmar Sal forest for last several hundreds of years and are dependent on forest flora for their social and livelihood needs. During the study on Socio economic pattern of Baiga tribe 15 plants have been recorded being used for edible purpose, 03 plants for building construction and thatching purpose, 04 plants for extraction of vegetable dye used in colouring of clothes, 06 plants from which gum is collected for edible purpose and also used in ceramics industry and for medicinal purposes, 03 plants for making country liquor, 06 plants in extraction of tannin and 02 plants in making of agricultural implements.

1438. **Rai, Rajib & Tripathi, S.P. 2008.** “‘Deogudi’ sacred grove— A tribal concept of conservation of plants in bastar state, Chhattisgarh”. *Indian Forester* 134(12): 1686–1695. Abstract: Though these groves are small in size, they play an excellent role to conserve biodiversity. A large number of plants of economic importance and various medicinal uses are conserved by tribals in sacred grove called ‘Deogudi’ in Bastar. On the other hand they play a vital role in maintenance of local socio-cultural patterns and religious rites and rituals are performed in these sacred groves by tribals. The study concludes that ‘Deogudi’- the sacred grove plays a vital role in conservation of biological diversity in tribal pockets of Bastar in Chhattisgarh state.
1439. **Rai, Rajiv, Nath, V. & Shukla, P.K. 2002.** “Ethno-medicinal studies on Bhariya tribes in Satpura plateau of Madhya Pradesh”. *New Agriculturist* 13(1-2): 109–114.
1440. **Rai, Rajiv, Nath, V. & Shukla, P.K. 2003.** “Ethnobiological studies on Hill Korwa tribe of Chhattisgarh”. *J. Trop. Forest.* 19(1&2): 35-46. Abstract: Hill Korwa tribe belongs to the most primitive tribal community of Chhattisgarh. These tribals are mostly scattered in the districts of Bilaspur, Sarguja (Ambikapur), Korba and Raigarh. The tribal community has 12-13 per cent of the total tribal population of the state. The community resides in revenue and forest villages in inaccessible mountainous regions and undulating plateaus. Economy of these tribals is forest-based. Earlier, they were characterised as nomads and hunters but folklore survey revealed that now they have started fishing, hunting, cultivation of agricultural and horticultural crops and rearing of animals. They collect rhizomes, leaves, pods and fruits from forests for edible purpose. Women use twigs for making tooth brushes, culms and leaves for making brooms, mats, plates and thatching of houses from various forestry plants. They also extract oil for cooking and other purposes and dyes for colouring clothes. During the present study, ethnobiological

information about Hill Korwa tribe, on their origin, appearance, clothing, habitat, occupation, social structure, housing, cultivation system of agricultural and horticultural crops, festivals, folksongs, traditions for marriage, social hierarchy, tattooing, and literacy, etc. was collected. The information on the impact of vegetation on the culture of Hill Korwa tribe was also collected and documented. Plants used by the tribe for medicinal and edible purposes, for making miscellaneous items and houses, etc. were also recorded and identified.

1441. **Rai, Rajiv, Nath, V. & Shukla, P.K. 2003.** "Ethnobiological studies on Bhariya tribes of Madhya Pradesh". *J. Trop. Forest.* 19(1): 150–160.
1442. **Rai, Rajiv, Nath, V. & Shukla, P.K. 2004.** "Ethnobotanical studies in Patalkot valley in Chhindwara district of Madhya Pradesh". *J. Trop. Forest.* 20(1&2): 38–50. Abstract: The data are based on floristic observations and personal discussions held with Bhariya tribal people during ethno-botanical survey in Patalkot valley. The paper describes utilization of six plants for edible purpose, seven plants for construction of houses, four plants for making agricultural implements, eight plants for making brooms, mats, donaplates etc., four plants for extraction of tannin, three plants for colouring clothes, five plants for collection of gum and forty two plants for the preparation of medicines to cure various ailments. The observations have been recorded during the ethnobotanical studies on Bhariya tribe- a primitive tribe in Patalkot valley of Satpura plateau in Chhindwara district of Madhya Pradesh.
1443. **Rai, Rajiv, Nath, V. & Shukla, P.K. 2004.** "Ethnobotanical studies in Patalkot valley in Chhindawara district of Madhya Pradesh". *J. Trop. Forest.* 20(2): 38–50. Abstract: The data are based on floristic observations and personal discussions held with Bhariya tribal people during ethno-botanical survey in Patalkot valley. The paper describes utilization of six plants for edible purpose, seven plants for construction of houses, four plants for making agricultural implements, eight plants for making brooms, mats, donaplates etc., four plants for extraction of tannin, three plants for colouring clothes, five plants for collection of gum and forty two plants for the preparation of medicines to cure various ailments. The observations have been recorded during the ethnobotanical studies on Bhariya tribe- a primitive tribe in Patalkot valley of Satpura plateau in Chhindwara district of Madhya Pradesh.
1444. **Rai, Rajiv, Nath, V. & Shukla, P.K. 2004.** Characteristics and ethnobotanical studies on primitive tribes of Madhya Pradesh. In: Singh, V.K., Govils, J.N., Hashmi, S. & Singh, G. (Eds). *Recent progress in medicinal plants. Vol. 1: Ethno-medicine and Pharmacognosy.* Research Book Centre, New Delhi. Pp. 543-552.
1445. **Rai, Rajiv, Nath, V. & Shukla, P.K. 2004.** "Plants in magico-religious beliefs of Baiga tribe in Central India". *J. Trop. Forest.* 20(3&4): 39–50. Abstract: Worship of trees, flowers and plants has a significant place in the life of Baiga tribe. This tribe is distributed

in tribal pockets of central India in the states of Madhya Pradesh and Chhattisgarh. A study was made to document the use of such plants and their parts in the magico-religious beliefs as associated with the culture of Baiga tribe. Baigas worship flowers and plant parts as they believe that gods like Lord Brahma, Lord Vidhyadhara, Lord Shiva, Lord Narayana, and Lord Ganesh, and goddesses like Lakshmi, Kali, Parvati and Ambika reside in many of these plants. Therefore, the tribal community preserves these plants from any damage or cutting due to socio- and magico-religious beliefs. Plants like *Aegle marmelos*, *Azadirachta indica*, *Abrus precatorius*, *Aloe barbadensis*, *Bridelia spinosa*, *Calotropis gigantea*, *Centella asiatica*, *Citrus medica*, *Curcuma amada*, *Curcuma aromatica*, *Curcuma caesia*, *Curcuma longa*, *Datura metel*, *Eclipta alba*, *Evolvulus alsinoides*, *Ficus religiosa*, *Holarrhena antidysenterica*, *Madhuca longifolia*, *Mangifera indica*, *Nerium indicum*, *Nelumbo nucifera*, *Ocimum sanctum*, *Radumachera xylocarpa*, *Sesbania grandiflora*, *Shorea robusta*, *Stereospermum chelonoides*, *Viola odorata*, *Woodfordia fruticosa* and *Zizyphus mauritiana* have been associated with various religious ceremonies, rituals, rites and magico-religious beliefs of Baiga tribe in central India and the same have been briefly described in this paper. The magico-religious beliefs are prevalent in pockets of Baigas and are related to good or evil spirits and faith in the existence of supernatural power. These beliefs influence day-to-day activity of tribals and these beliefs are transferred from one generation to another generation.

1446. **Ramrakhiyani, C., Gaur, V.N. & Athaley, R. 2016.** "Comparative and therapeutic studies of some medicinal plants of family Fabaceae". *IOSR J. Pharma. & Biol. Sci.* 11(2): 17–19. Abstract: To investigate the therapeutic properties of some plants of family fabaceae, it was necessary to had survey of place near Bairagarh, Bhowanri, District Bhopal, to find the species of family Fabaceae. Their site of habitat was search and it was found at farm sites. The family Fabaceae was chosen to explore its medicinal values. The plants like *Dalbergia sissoo*, *Cassia fistula* and *Psium sativum* was taken for study methodology. It reveals that these plants had many similarities and dissimilarities in their therapeutic values. It is need to study their comparative therapeutic values to enhance their values for present generation to cure many diseases. To compare their medicinal potentials and to explore their uses in similar and dissimilar diseases. These plants had great medicinal potentials in leaves, pods (fruits), bark stem and roots. These plants are natives of Madhya Pradesh. These plants are being used as medicinal plants from Ayurveda era.
1447. **Ray, S., Sheikh, M. & Mishra, S. 2011.** "Ethnomedicinl plants used by tribals of east Nimar region, Madhya Pradesh". *Indian J. Tradit. Knowl.* 10(2): 367–371. Abstract: Several ethnobotanical surveys were carried out in different region of East Nimar during 2004-2007. The paper deals with the 63 species of medicinal plants belonging to 55 genera and 43 families commonly used by the tribal people of East Nimar Region.

These potential medicinal plants are used in 28 types of different diseases. The scientific, vernacular and family names of these plants, along with the parts used and the mode of administration are enumerated.

1448. **Roy, G.P. & Chaturvedi, K.K. 1986.** "Ethnomedicinal trees of Abujh-marh area, Madhya Pradesh". *Folklore* 27: 95–100.
1449. **Roy, G.P. & Chaturvedi, K.K. 1986.** "Plants used as tonic by the tribals of Abujh-marh reserve area, Bastar district in Madhya Pradesh". *Vanyajati* 34: 27–32.
1450. **Prasad, R., Pandey, R.K & Bhattacharya, P. 1990.** Socio– economic and ethno-medico – botanical studies of Patalkot region. A case study of Bhariya tribes. In: *National Seminar on Medicinal and Aromatic Plants, Jabalpur, 6–7 April 1990*. Proceedings. pp. 46-59.
1451. **Quamar M.F. & Bera S.K. 2014.** "Ethno-medico-botanical studies of plant resources of Hoshangabad district, Madhya Pradesh, India: Retrospect and Prospects". *J. Pl. Sci. Res.* 1(1): 101–111. Abstract: The present communication reports the folk medicinal uses of plants by the tribes of Hoshangabad District, Madhya Pradesh (India), which are therapeutically used against different ailments of human being as well as the livestock. In all, 179 plant species comprising 47 trees, 36 shrubs/undershrubs, 74 herbs, 21 climbers and 1 liana belonging to 76 families, used by the tribal people, have been enumerated and discussed, which signifies the ethnomedicinal values of plant species occur in the study area. The study, thus, highlights the potential of ethnobotanical research and the need for documentation of traditional knowledge pertaining to the utilization of plants as medicine. Pharmacological analysis is obligatory in order to authenticate their accuracy and future prospects in the drug development with due benefit-sharing with the primary stakeholders for the greater advantage of mankind in the study area. The study could play a significant role in resolving the controversies pertaining to biopiracy and Intellectual Property Rights.
1452. **Rahangdale, C.P., Patley, R.K. & Yadav, K.C. 2014.** "Phytodiversity of ethnomedicinal plants in sacred groves and its traditional uses in Kabirdham district of Chhattisgarh". *Indian Forester* 140(1): 86–92. Abstract: The paper describes distribution and local/traditional uses of the 100 ethnomedicinal plants belonging to 85 genera and 47 families present in Kabiradham district of Chhattisgarh state. Out of these, 58 species are trees, 23 herbs, 15 shrubs, 3 climbers and 2 palms. These identified plants need protection from the biotic pressure. Various plant parts, such as bark (31), leaves and fruits (30 each), root (25), seed (18), whole plant (12), gum (10), flowers and stem (5 each), sap, wood and rhizome (4 each), bulb, oil and latex (3 each), pod (2) and bud, tadi, thorn and resin ( 1 each) were used for treatment of different ailments.
1453. **Rahangdale, C.P., Yadav, K.C. & Patle, N.K. 2013.** "Role of a Sacred Grove in conservation of medicinal plants in Kabirdham district of Chhattisgarh". *J. Trop. Forest.*

- 29(3): 58–67. Abstract: Sacred groves are tracts of near-virgin forests, the vestiges of an ancient practice in which people protected forest patches, A repository of medicinal plants is a unique example of the all-embracing concept and practice of the Indian way of *in-situ* conservation of biodiversity. This paper deals with an account of the role of a sacred grove in the conservation of regional medicinal plants and local/traditional uses of 100 medicinal plants belonging to 55 genera and 47 families. Out of these, 58 species are trees, 23 herbs, 14 shrubs, 3 climbers and 2 palms. These identified medicinal plants need protection from the biotic pressure.
1454. **Rai, M.K., Pandey, M.K. & Acharya, D. 2000.** "Ethnomedicinal plants used by Gond tribe of Bhanadehi, distt. Chhindwara, M.P.". *J. Non-Timber Forest Prod.* 7(3&4): 237–241.
1455. **Rajendran, A. & Sikarwar, R.L.S. 2003.** "Intra-cultural ethno-botanical studies on the tribe Kadar (TamilNadu) and Sahariya (M.P.)". *J. Econ. Taxon. Bot.* 27(3): 662–664.
1456. **Ranade, R.M. 1956.** "Oil pressing as home industry among Bhils and Bailalas". *Vanyajati* 4(1): 40–41.
1457. **Rawat, A., Gupta, A. & Sahu, T.R. 2005.** "Some wild plants used as substituting food by tribals of Noradehi Wildlife Sanctuary, Sagar (M.P.)". *J. Bot. Soc. Univ. Sagar* 40: 217–222. Abstract: The study was conducted with a view to documenting the folklore use of wild edible plants to help accelerate the research work to combat nutrient deficiency diseases and food scarcity problems in the Noradehi Wildlife Sanctuary. These plants have an important role in substituting food, especially in rural area. Plant parts such as rhizome, leaves, shoot, flowers, fruits and seeds are eaten in various ways. The paper deals with the study of 25 plant species consumed by the tribals and other rural people living in and around the Noradehi Wildlife Sanctuary.
1458. **Rawat, A., Gupta, A. & Sahu, T.R. 2006.** "Utility of indigenous knowledge of Gond tribals of Noradehi Wildlife Sanctuary (Sagar) on medicinal plants and need for their conservation". *J. Bot. Soc. Univ. Sagar* 41: 30–36. Abstract: The present paper describes the status of indigenous knowledge on medicinal plants found in Noradehi Wildlife Sanctuary. The population of this Sanctuary is dominated by tribals mainly Gond. Owing to their constant association with forest environment, they have considerable knowledge about plants and their medicinal utility. The indigenous knowledge about medicinal plants gathered by these tribals through trial and error over centuries is being kept secret and is passed on from generation to generation by the tribal medicinemen. The paper deals with 20 common plant species of Noradehi Sanctuary.
1459. **Rawat, A., Gupta, A. & Sahu, T.R. 2008.** Indigenous knowledge of veterinary medicines among Gond tribals of Noradehi wildlife sanctuary. In: Patel, D.A. (Ed.), *Herbal cures: Traditional approaches*. Aavishkar Publishers and Distributors, Jaipur (Rajasthan). Pp. 302–315.

1460. **Rawat, S., Rahangdale, C.P., Meshram, V.&Baghele, D.2016.** "Indigenous knowledge and use of medicinal plants by tribal community in Balaghat districts of Madhya Pradesh". *J. Trop. Forest.* 32(4): 9–14. Abstract: The present investigation was carried out in Balaghat district of Madhya Pradesh to know the socio- personal and economic attributes of tribals, assess the indigenous knowledge about medicinal plants used in the health care and determine the relationship and contribution of various socio-personal and economic attributes with indigenous knowledge of medicinal plants. A total of 120 respondents from twelve villages of Khairlanji block of the district were interviewed with the help of pre-tested structured schedule. The study revealed that knowledge of medicinal plants, age, level of education and distance from the health centers play the most important role in influencing the usage of medicinal plants in the treatment of diseases by the tribal people.
1461. **Rizwana & Lyaqet.2011.** "Traditional knowledge used in paddy cultivation in Raipur district, Chhattisgarh". *Indian J. Tradit. Knowl.* 10(2): 384–385. Abstract: The study was conducted in six villages of Dharsiva block of Raipur district of Chhattisgarh. Rice is the main crop being cultivated. The paper describes the indigenous technologies used by the farmers in paddy cultivation. For seed germination, preventing the crop from insect/ pest attack in the field and during the storage they apply their rich traditional knowledge. They find the indigenous knowledge very useful, therefore Indigenous technical knowledge possessed by the farmers shall be identified, and farmers shall be helped to understand and exchange the cheaper, viable and reliable technologies in their areas.
1462. **Roy, D. & Kanungo, V.K. 2016.** "Common medicinal herbs of family Asteraceae in Raipur district of Chhattisgarh, India". *Indian J. Appl. Pure Biol.* 31(2): 177–180. Abstract: The present paper deals with the survey of common medicinal herbs of the family Asteraceae in Raipur District of Chhattisgarh, India. About 44% of the total area of the area is under forest cover, with a rich biodiversity, which has not been fully explored. The survey revealed that 68 species belonging to 51 genera were wild, whereas 4 species under 3 genera were found under cultivation. Majority of these species have medicinal utility in various ailments.
1463. **Roy, G.P. & Chaturvedi, K.K. 1986.** "Ethnomedicinal plants of Abujh Marh reserve area, Bastar district in Madhya Pradesh". *Folklore*27(5): 95–98.
1464. **Roy, G.P. & Chaturvedi, K.K. 1987.** "Plants used as tonic by the tribals of Abujh Marh reserve area, Bastar district in Madhya Pradesh". *Vanyajati*34: 27–32.
1465. **Roy, G.P. & Chaturvedi, K.K. 1987.** "Less known medicinal uses of rare and endangered plants of Abujh-marh reserve area of Bastar, Madhya Pradesh". *J. Econ. Taxon. Bot.* 9: 325–328. Abstract: The present paper deals with 12 rare and endangered ethno-medicinal plants. These are, *Asparagus racemosus* Willd., *Blepharispermum subsessile* DC., *Cephalostachyum pergracile* Munro, *Chlorophytum tuberosum* (Roxb.) Baker, *Curculigo*

*orchoides* Gaertn., *Disocorea pubera* Blume, *Entada pursaetha* DC., *Eulophia explanata* Lindl., *Glossogyne bidens* (Retz.) Alston, *Hemidesmus indicus* (L.) R. Br., *Tinospora cordifolia* Miers. and *Thysanolaena maxima* (Roxb.) O. Ktze. The term rare and endangered has been conserved for the Abujh-Marh area only.

1466. **Roy, J.K. & Rao, R.K. 1957.** "Investigation on the diet of the Muria of Bastar district". *Bull. Dept. Anthropol.* 6: 33–45.
1467. **Roy, J.K., Rao, R.K. & Biswas, S.K. 1956.** "Diet surveys amongst the tribes of Madhya Pradesh (Baigas and Gond of Madhya Pradesh). Part I". *Bull. Dept. Anthropol.* 5: 1–10.
1468. **Roy, S. 2000.** "Ethnomedicinal plants of Dewas (M.P.) India. In *Vistas in ethnobotany*". *Indian J. Appl. & Pure Biol.* 16: 58–68.
1469. **Sahu, B. & Sahu, T.R. 2004.** "Ethnobotanical observation on tribal areas of Vidisha district, Madhya Pradesh". *Bull. Bot. Surv. India* 46(1-4): 273–279. Abstract: The Saharias and Bhil-Mina tribal communities living in Vidisha district of Madhya Pradesh mostly depend on the forests for medicine, food and fibre. Ethnobotanical exploration of Gyaraspur Tehsil of Vidisha has received little attention. This paper deals with an ethnobotanical information of 58 plants collected from tribal dominating area.
1470. **Sahu, B.K. 2007.** "Grasses of ethnomedicinal value in Vidisha district of Madhya Pradesh". *J. Non-Timber Forest Prod.* 14(1): 71–72. Abstract: Grasses are, economically, the most important group of plants; they belong to family Poaceae and provide major and minor cereals, fodder and raw material of papers, medicine, drugs etc. The tribal and rural people of Vidisha district use different parts of grasses in crude form as cure for many diseases. This paper deals with 18 grass species used in fungal infection, haematuria, urinary diseases, intestinal worm, fever, cough, bodyache, wounds, snake bite, gonorrhoea etc.
1471. **Sahu, K.P. & Masih, S.K. 2012.** "Phyto-sociological status of medicinal plants of *Terminalia tomentosa* dominated plant community structure". *Vaniki Sandesh* 3(1): 22–40. Abstract: During the phyto-sociological investigation done in natural forest areas of Balaghat district of Madhya Pradesh, 12 forest tree species dominant community structure have been observed. They are *Terminalia tomentosa*, *Shorea robusta*, *Tectona grandis*, *Anogeissus latifolia*, *Pterocarpus marsupium*, *Cleistanthus collinus*, *Grewia obtusifolia*, *Bridelia retusa*, *Garuga pinnata*, *Buchanania lanzan*, *Semecarpus anacardium* and *Pinus roxburghii*. The present paper deals with phytosociological attributes of first one *Terminalia tomentosa* dominant communities. This community is taken from the marked predominance of *Terminalia tomentosa*, but this species occurs and may ever predominate locally under a wide range of condition in most forms of deciduous forest. This is the most dominant community in this district and is spread throughout the area. A total of 160 plant species of tree, shrubs and herbs have been identified from *Terminalia tomentosa* dominant plant community. Trees, shrubs and herbs along with regeneration



status represented 81, 60 and 117 plant species strata. Phytosociological analysis of all plant species at different canopy level in *Terminalia tomentosa* dominant communities is discussed in this paper in details up to Density/ha., Frequency percentage, Importance Value Index, Abundance/Frequency Ratio, Biodiversity Index, Basal Area/m<sup>2</sup>/ha.

1472. **Sahu, P., Sahu, T.R. & Nonhare, B.P. 2004.** "Medicinal and aromatic weed diversity in Botanic Garden and their sustainable utilisation for conservation". *Bull. Bot. Surv. India* 46(1-4): 411–420. Abstract: Total 81 weeds belonging to 59 genera and 31 families growing in the university Botanic garden at Sagar were found medicinally important. Various parts of all the weeds have been analysed for their medicinal utility. Out of 81 weeds, leaves of 64 plants are found useful for various disorders. This is followed by root of 25 plants which are medicinally important. Disease wise analysis has also been carried out. Analysis reveals that of cut, wounds, boils and burns about 29 weed plants are used, whereas 21 weed species each are used for asthma and skin diseases.
1473. **Sahu, P.K. 2010.** "Traditional knowledge and indigenous medicine of the tribal of Biosphere Reserve, Central India". *Int. J. Pharm. Life Sci.* 1(8): 471–478. Abstract: The present ethno-botanical exploration study presents the utilities of traditional knowledge and indigenous medicine by tribes of the Achanakmar-Amarkantak Biosphere Reserve (AABR), central India. Total seventy plant species from forty three families, which are therapeutically used against different diseases, such as stomachache, fever, jaundice, dysentery, skin diseases, piles and spermatorrhoea etc., are covered in this paper. Part of the plant used, dosage, and the mode of drug administration in different ailments are described. The present study was focused on study area to collect traditional knowledge (IK) regarding medicinal plants from herbal practioners, and ethnic peoples.
1474. **Sahu, P.K. 2011.** "Plants used by Gond and Baiga women in ethnogynaecological disorders in Achanakmar wildlife sanctuary, Bilaspur, C.G.". *Int. J. Pharm. Life Sci.* 2(2): 559–561. Abstract: Traditional medicines are still under practice in Indian villages and have been developed through experience of many generations. The present communication reports first hand information gathered on 20 plant species traditionally used by Gond and Baiga women of Achanakmar wildlife sanctuary, Bilaspur for the treatment of various diseases and disorders related to gynaecological problems. Valuable information about the medicinal uses of certain plants against various diseases of the Gond and Baiga women were obtained through personal interviews and collection. The botanical names, families, local name, and locality of these collections are also given along with medicinal uses.
1475. **Sahu, P.K. & Srivastava, A. 2010.** "Medicinal utilities of weed flora of agriculture field of JNKVV, Jabalpur". *Int. J. Pharm. Life Sci.* 1(8): 448–450. Abstract: Weed flora of Agriculture field has large ecological amplitude, so they multiply and flourish well even in changed environmental conditions. It has been observed that the traditional knowledge

which people of the cultivated field possess on the weeds and their uses is of much use which should be explored properly. The present paper enumerates the uses of some weeds collected agriculture and cultivated fields of JNKVV, Jabalpur, Madhya Pradesh.

1476. **Sahu, P.K., Kumari, A., Sao, S., Singh, M. & Pandey, P. 2013.** "Sacred plants and their ethnobotanical importance in Central India: A mini review". *Int. J. Pharm. Life Sci.* 4(8): 2910–2914. Abstract: Sacred groves are distributed across the globe, and diverse cultures recognize them in different ways encoding various rules for their protection. Sacred groves occur in many parts of India viz., Western Ghats, Central India, northeast India, etc particularly where the indigenous communities live. The sacred plants of India are actually worshipped throughout the nation owing only to its mythological significance. In India various god and goddess are worshipped in Hindu religion throughout India. Plants flowers and leaves are used during worship for pushpa-puja and patra-puja. An attempt has been made to identify folklore medicinally important plants frequently used by rural communities of sacred groves and its environs of Budelkhand region of Madhya Pradesh in central India. A total of thirteen sacred groves and medicinal importance of thirteen genera and thirteen families were enumerated.
1477. **Sahu, P.K., Masih, Vane, Gupta, S., Sen, D.L. & Tiwari, A. 2014.** "Ethnomedicinal plants used in the healthcare systems of tribes of Dantewada, Chhattisgarh, India". *Amer. J. Pl. Sci.* 5(11): 1632–1643. Abstract: The tribal people depend on forests for their livelihood and most of the rural people still depend on traditional medicine as a primary healthcare source. The paper highlights the rich plant resources and the vast wealth of ethnobotanical information available with the various tribes of the region. In this paper, some new and less known ethno medicinal uses of 104 plants of tribes of Dantewada, Dakshin Bastar C.G. in different ailments have been reported. The main objective of present work is to give the information and documentation of medicinal plant used by tribal of the study sites. The ethnomedicinal information was gathered from interviews with living elders belonging to Madiya, Muriya, Gond and Bhatra tribes of the study area. The present work on ethnomedicinal plants, used in the healthcare systems of tribes in 15 villages, was carried out from Geedam block of Dantewada, Dakshin Bastar C.G.
1478. **Sahu, S.K. 2017.** "Antidiabetic plants in Madhya Pradesh, India". *Int. J. Bot. Stud.* 2(6): 113–115. Abstract: Chitrakoot region is characterized by a rich floral diversity and an equally rich ethnomedicinal tradition. Herbal medicine is the dominant system of medicine practiced by the local tribes of this region for the treatment of diabetes during the course of the present studies it was found that 20 species of plants belonging to 18 Families are used as antidiabetic agents in the folk medicinal practices in the region and 81% of these plants are hitherto unreported as hypoglycemic agents. This finding may lead to serious research towards developing new and efficient drugs for diabetes.

1479. **Sahu, T.R. 1982.** "An ethnobotanical study of Madhya Pradesh 1: Plants used against various disorders among tribal women". *Ancient Sci. Life* 1(3): 178–181. Abstract: The ethnobotanical survey was made during last two years in the tribal population of Madhya Pradesh. Valuable information about the medicinal use of certain wild species against various diseases amongst tribal women are obtained by personal interviews. Some species are being used by them against various venereal diseases. Different plant parts of few species are also used by them for antifertility purposes. Some of these interesting medicinal properties of plants are given in the present communication.
1480. **Sahu, T.R. 1966.** Life support promising food plants among aboriginals in Bastar. In: Jain, S.K. (Ed.), *Ethnobiology in Human Welfare*. Deep Publication, New Delhi. Pp. 26–30.
1481. **Sahu, T.R. 1984.** "Less known uses of weeds as medicinal plants". *Ancient Sci. Life* 3(4): 245–249. Abstract: In this paper the author presents medicinal or otherwise useful weed species with details of family, vernacular name and its medicinal utility. Information on other general economic importance of medicinal weeds is also described here.
1482. **Sahu, T.R. 1999.** Biodiversity conservation of Bastar (M.P.) in traditional and religious context. In: Tandon, R.K. & Singh, P. (Eds.), *Biodiversity, Taxonomy and Ecology*. Scientific Publishers, Jodhpur. Pp. 55–64.
1483. **Sahu, T.R. & Saha, Indira 1982.** "Native uses of plants during various complaints among children". *Bull. Bot. Soc. Univ. Saugar* 29: 79–80. Abstract: In the present communication the use of certain plants against various disorders among children have been included. The species are alphabetically arranged with details of family, local and common hindi names. As far as possible the latest botanical names are given.
1484. **Sahu, T.R. & Sahu, P. 2002.** Ethnobotanical scenario of Madhya Pradesh: Diversity in flora, knowledge and culture in tribal belt of Bastar, In: Trivedi, P.C. (Ed.), *Ethnobotany*. Aavishjar Publishers & Distributors, Jaipur. Pp. 73–97.
1485. **Sahu, T.R., Pandey, R.K. & Bawistale, O. 2012.** "Phytoresources of Satpura region of Chhindwara district, Madhya Pradesh: An ethno-medicinal case study for antimalarials". *J. Trop. Forest.* 28(3): 64–67. Abstract: Ethnomedicinal survey was conducted in Satpura region with special reference to Chhindwara district of Madhya Pradesh, India. This district is a forest district, Chhindwara district, has acquired great importance because of its scenic beauty. Patalkot is a lovely landscape located at a depth of 1200-1500 feet in a valley, inhabited by Gonds, Bharia tribes who are entirely dependent on forest for medication. Information on 15 plant species belong to 15 genera and 14 families which are traditionally used as medicine to cure malaria was collected. The plant part use, traditional preparation and doses for administration are given in the present paper.
1486. **Sahu, T.R., Sahu, I. & Dakwale, R.N. 1983.** "Further contributions towards the

ethnobotany of Madhya Pradesh 2: Plants used against diarrhoea and dysentery". *Ancient Sci. Life* 2(3): 169–170. Abstract: The ethnobotanical survey was made during last two years in the tribal population of Madhya Pradesh. Valuable information about the medicinal use of certain plants used against diarrhoea and dysentery amongst tribal population were obtained by personal interviews. The medicinal properties or those plants are also given in this communications.

1487. **Sahu, T.R., Sahu, P. & Dubey, G. 2004.** "Popular beverage in Abujhmaria tribal dominating in Abujhmarh region, Bastar, Chhattisgarh". *Vanyajati* 52(1): 47–52.
1488. **Sahu, T.R., Sahu, B.K., Sahu, P. & Dubey, G. 2003.** "Uses and conservation of the plants on folklore in Abujhmarh tribal dominating Abujhmarh area (Bastar- Chhattisgarh)". *Vanyajati* 51(2): 46–52.
1489. **Saini, V. 2005.** "Observation on certain ethnobotanically important plants of Jabalpur district with their medicinal use and chemical composition". *J. Bot. Soc. Univ. Sagar* 40:103–108. Abstract: Jabalpur is located in the central part of Madhya Pradesh, about 55% of the population are living in tribal and rural areas. Ethnobotany broadly means all aspects of direct relationship of plants with man. The search of the first man for natural forest products to satisfy his hunger and cure his ailments was the birth of this science. Due to lack of health care and medical facilities the lives of people are much affected in tribal areas. Ten medicinal plants have been alphabetically enumerated with their medicinal use and chemical composition.
1490. **Saini, V.K. 1996.** Plants in the welfare of tribal women and children in certain areas of central India. In: Jain, S.K. (Ed.), *Ethnobiology of Women Welfare*, Deep Publication, New Delhi. Pp. 140–144.
1491. **Saini, V.K & Charmkar, S.P. (2014).** "Ethno medicinal value of some plants in central India with special emphasis to Jabalpur region". *Life Sci. Bull.* 10(2): 282–284.
1492. **Saini, V.K. & Oommachan, M. 1993.** "Study of certain medicinal plants used for diseases of tribal and rural women at Jabalpur and Mandla districts". *Indian J. Appl. Pure Biol.* 8: 83–86.
1493. **Saini, V.K. & Charmkar, S. 2013.** "Ethnomedicinal value of some plant species in central India with special emphasis to Jabalpur region". *Life Sci. Bull.* 10(2): 282–284. Abstract: Medicinal plants used by the indigenous people of Jabalpur region were catalogued based on collection during field trips and visit to traditional medicinal practitioners. Traditional medicine in the natural health care is practiced by all human cultures from ancient from ancient times. Ethical and intellectual questionnaire were made to relate this study to overcome the objectives. The paper deals with 20 plant species used for curing different type of diseases. The medicinal plant species were reported along with Botanical names, local names, families, methods of administration and prescribed doses. With the advent of human civilization, many systems of therapy have been developed

primarily based on plants. It is necessary that we should have full knowledge regarding the occurrence, frequency, distribution and phenology of various plants for their proper utilization. Faced with rapid depletion and the current focus on cheaper alternatives to synthetic drugs, the need to document these plant resources is essential.

1494. **Sainkhediya, Jeetendra & Aske, Dilip Kumar. 2012.** "Ethno medicinal plants used by tribal communities for the treatment of snakebite in West Nimar, MP, India". *ISCA J. Biol. Sci.* 1(2): 77–79. Abstract: Seven Village of Khargone district of Madhya Pradesh, India were selected for observing folklore claims on some plant species used for the treatment of snakebite. Various plants parts are being used in different ways. The study revealed 26 taxa belonging to 25 genera and 16 families of flowering plants. To ascertain credibility of folklore claims, a comparison on use has been made.
1495. **Sainkhediya, Jeetendra & Ray, S. 2014.** "Studies on sacred groves of Nimar region, Madhya Pradesh, India". *Indian J. Pl. Sci.*3(1): 64-69. Abstract: The Nimar region is situated in the southern western part of Madhya Pradesh and covering four districts namely West Nimat (Khargaon), Barwani, East Nimar (Khandwa) and Burhanpur. Northern part of Nimar region is covered with Vindhyan scabs and southern part with Satpura hill ranges. A study was carried out in Nimar region of Madhya Pradesh, India to explore the sacred groves of Nimar region. Sacred groves of Nimar region were served during 2010-2013 and observed 12 sacred groves in Nimar region. These sacred groves are important role in conservation of some RET plants. Some threatened plants are reported which are well protected in the sacred groves of the study area. Mentioning few of them are *Didymocarpus pygmea*, *Selaginella bryopteris*, *Ensete superba*, *Centella asiatica*, *Amorphophallus bulbifera*, *A. paeoniifolius*, *Gloriosa superba*, , *Helicteres isora*, *Ceropegia hirsute*, *Costus speciosus*, *Sarcostemma acidum*, *Grewia tenax*, *G. damina*, *G. Sapida* and *Tinospora cordifolia*.
1496. **Saket, S.P. 2018.** "Wild and some threatened medicinal plants used by tribals of Sidhi district (Madhya Pradesh), India". *Int. J. Bot. Stud.* 3(2): 82–86. Abstract: The present paper on "Wild medicinal plants used by tribals of Sidhi District Madhya Pradesh". Sidhi region is very interior part and rich in plant biodiversity because of its variety of geology, land shapes like sandy, valley and hill areas. Sidhi is well known for its natural beauty, historical importance and rich cultural roots. This region located in a state between 24.2071° N latitude, 81.7787° E longitude. There are varieties of climate and altitudinal variations compiled with varied ecological habitants. A total 81 important wild medicinal plant listed which are useful for the several drastic human diseases. We can richness of species, genera and families at a place.
1497. **Saluja, P.K. & Shrivastava, K. 2011.** "Medicinal importance of weeds found in urban area of Raipur (C.G.)". *Indian J. Appl. Pure Biol.* 26(1): 159–170. Abstract: Raipur City is covered with number of weeds. Most of the weeds have medicinal properties, which

give health, vitality and longevity to the people. In the present survey it is aimed to discuss the medicinal importance of more than 80 weeds found in urban area of Raipur city, which is frequently used as medicine by native of this area. Survey was carried out during 2007 to 2008. The information has been gathered from practicing herbal medication and available literature. The aim of survey is to spread knowledge of weed plants, their medicinal use and conservation.

1498. **Samar, R., Shrivastava, P.N. & Jain, M. 2015.** "Ethnobotanical study of traditional medicinal plants used by tribe of Guna district, Madhya Pradesh, India". *Int. J. Curr. Microbiol. Appl. Sci.* 4(7): 466–471. Abstract: Ethno-botanical study on traditional medicinal plants was conducted between 2011-2013 in Guna district of Madhya Pradesh, India and documented different types of traditional medicinal plants used by the indigenous peoples. The study was focused on identifying medicinal plants, disease treated, part of the plant used, methods of preparation, route of administration, ingredients added etc. The data was collected using interview and questionnaires by selecting 16 healers using purposive sampling method. A total of 32 medicinal plant species were collected and identified from the study area for treating various human ailments. The paper enumerates these medicinal plant species belonging to 26 genera and 18 families.
1499. **Samar, R., Agrawal, M.K., Varma, A. & Jain, M. 2012.** "Ethno-botanical documentation of some vegetable plants in the villages of Guna district, Madhya Pradesh, India". *Indian J. Life Sci.* 1(2): 75–78. Abstract: The paper deals about some vegetable species used by tribal communities of Guna district of Madhya Pradesh. A record of two vegetables belonging to family Solanaeaceae, used by fourteen villages of Guna district, M. P., India are given. Characteristic features of vegetable varieties are also mentioned.
1500. **Samvatsar, S. & Diwanji, V.B. 1996.** "Plants used for skin diseases, cuts, wounds and bruises by the tribals of Western M.P.". *J. Econ. Taxon. Bot., Addit. Ser.* 12: 192–195. Abstract: Ethnobotanical uses of 16 plants used in the treatment of skin diseases, cuts, wounds and bruises by the tribals of western Madhya Pradesh have been reported.
1501. **Samvatsar, S. & Diwanji, V.B. 1996.** "House and households of tribal of western Madhya Pradesh: An ethnobotanical study". *J. Econ. Taxon. Bot., Addit. Ser.* 12: 196–198. Abstract: The present paper reports the use of different plant species by the tribals of western M.P. in house building, utensils, musical instruments and in preparation of strong drinks.
1502. **Samvatsar, S. & Diwanji, V.B. 1996.** "Plants used in snake and scorpion insect bites/stings by Adibasis of Jhabua (M.P.), India". *J. Econ. Taxon. Bot., Addit. Ser.* 12: 199–200. Abstract: The paper reports 8 species of plants used by tribals of Jhabua (M.P.) for the treatment of snake, scorpion and insect bites/stings.
1503. **Samvatsar, S. & Diwanji, V.B. 1999.** "Plants used for rheumatism by the tribals of Western M.P.". *J. Econ. Taxon. Bot.* 23(2): 305–314. Abstract: The paper deals with 91

plant species used by tribals of western M.P. for the treatment of rheumatism.

1504. **Samvatsar, S. & Diwanji, V.B. 2000.** "Plant sources for the treatment of jaundice in the tribals of Western Madhya Pradesh of India". *J. Ethnopharmacol.* 73(1-2): 313–316. Abstract: A survey of the tribals of Western Madhya Pradesh of India for the treatment of jaundice has yielded 13 plants for this purpose. Part of the plant used, dosage, duration, restriction on intake of food etc. has been reported.
1505. **Samvatsar, S. & Diwanji, V.B. 2004.** "Plants used for the treatment of different types of fevers by Bhils and its subtribes in India". *Indian J. Tradit. Knowl.* 3(1): 96–100. Abstract: Bhil including its subtribes is the third largest tribal community of India. This community of forest dwellers is well acquainted with medicinal properties of plants of their surroundings. Present paper deals with 14 plants used for different types of fevers by this tribal community.
1506. **Sandya, G.S. & Ahirwar, Ramesh Kumar. 2015.** "Ethnobotanical studies of some wild food plants of district Umaria, Central India". *Int. J. Sci. & Res.* 4(4): 432–435. Abstract: Paper deals the survey an attempt has been made to collect and record the folklores pertaining to the food utility of 38 plants species and 25 family of Angiosperms. The botanical name followed by local names and along with parts used are furnished. The tribal sects of Central India use under normal monsoon conditions, more or less the same food grains as that of civilised people of the society. The food grains include *Avena sativa*, *Vicia sativa*, etc. However, during the time of scarcity and famine they utilise other wild plants.
1507. **Sandya, G.S. & Sandya, K. 2013.** "Uses of ethnomedicinal plants by the tribes of Shahdol Division, Madhya Pradesh". *Int. J. Sci. & Res.* 4(4): 516–518. Abstract: Present study 31 ethnomedicinal plants have been identified for the treatment of various diseases. Herbarium has been prepared which contains information pertaining to botanical name, local name, plants used, their dose and process of administration. A survey of ethnomedicinal plants of shahdol division has been carried out with co-operation of tribal villagers.
1508. **Sandya, G.S. & Sandya, K. 2015.** "Ethnobotanical plants conservation by the tribes of Amarkantak area of district Anuppur, Madhya Pradesh, India". *Int. J. Sci. & Res.* 4(12): 1229–1231. Abstract: The present paper deals with 25 plants species which are conserved by the tribes of Amarkantak district Anuppur Madhya Pradesh. Due to destruction of habitat, biotic interference and indiscriminate exploitation of natural plants, many valuable plant species of this area are fast disappearing. Aborigines conserve these species by faiths, myths, taboos and religious aspects.
1509. **Sandya, K. & Ahirwar, Ramesh Kumar. 2015.** "Ethnomedicinal Uses of Plants Species by the Tribes of Shahdol District, Madhya Pradesh, India". *Int. J. Sci. & Res.* 4(2): 1912–1915. Abstract: The present paper deals with new or less known ethnomedicinal uses of

35 plants species recorded from knowledge persons of the area. The Shahdol district is shows remarkable diversity in its floristic elements. An efforts has been made to give an account of angiospermic plants in there, of which potential value among the tribal population observed.

1510. **Sangeeta, D.D. & Oommacha, M. 1994.** "Studies on the plants related to socio-religious ceremonies in the rural and tribal areas of Jabalpur and Mandla district". *Indian J. Appl. Pure Biol.* 9(1): 1–5.
1511. **Satya, V.2012.** "Dye yielding plants used in traditional art of Bagh printing". *Ethnobotany* 24: 101–107. Abstract: Bagh is a village in Dhar district of western MP, inhabited by Bhil tribal community. It is famous for Bagh caves and the indigenous art of Bagh prints on sarees and other textiles like salwar suits, kurtas and bed sheets. Bagh print is known globally for its special brightness and glow and some of these traditional artists have been honoured with the "President's Award" and also other National Award. This indigenous knowledge is associated with extraction, processing and printing of natural dyes from the plants. At present, about 15 families are engaged in this traditional profession providing art and employment to 15,000 people with annual turnover of Rs. 3.5 crore approximately. This paper deals with 15 dye yielding plant species used in Bagh printing.
1512. **Satya, V.2014.** "Herbal contact therapy as practised by tribal and rural inhabitants of western Madhya Pradesh". *Ethnobotany* 26: 62–65. Abstract: Western Madhya Pradesh comprises of 5 districts, namely Barwani, Dhar, Jhabua, Khargaone and Ratlam district. They are inhabited by Bhil, Bhilala and Barela tribes. Bhils are the third largest tribe in India and second largest in Madhya Pradesh. They have deep faith in supernatural powers of certain plants, which are associated with taboos, safeguard against evil spirits and riddance from diseases. Due to their magico-religious beliefs, they use various plants in different forms like, amulets, garlands of various plants parts like root pieces, stem pieces, leaves, fruits, seeds, etc. for curing various ailments. This method of therapy is called touch therapy or contact therapy. The herbal magic may be due to certain phytochemicals present in the plant parts or through physical touch, spiritual or psychological means. The present paper incorporates, information on 40 plant species generally employed during contact therapy by the tribals of western Madhya Pradesh.
1513. **Satya, V.2017.** "Indigenous plants used in fertility control and labour enhancement of women in West Nimar, Madhya Pradesh". *Ethnobotany* 29: 77–81. Abstract: The main objective of present investigation is to search herbal contraceptives and labour inducing plants in West Nimar region of Madhya Pradesh for providing health security to millions of underprivileged Indian women. 12 plants have been identified to be used as herbal contraceptives and 7 plants as labour inducing. The knowledge of ethno-medico-botany is fast disappearing under the impact of industrialization and urbanization. Therefore,



the collection, identification and documentation of ethno-medicinal data are inevitable for bio-prospecting.

1514. **Satya, V. & Solanki, C.M. 2009.** "Indigenous knowledge of veterinary medicines among tribals of West Nimar, Madhya Pradesh". *J. Econ. Taxon. Bot.* 33(4): 896–902. Abstract: The present paper deals with 72 plants used in veterinary medicine by Bhils and Bhilalas of West Nimar. These are used for 15 different ailments of cattle and arranged alphabetically with their family, vernacular name and specific uses.
1515. **Satya, V. & Solanki, C.M. 2010.** "Piscicidal plants used by Bhils in Western Madhya Pradesh". *Ethnobotany* 22:132–135. Abstract: Bhils are inhabitants of Barwani, Dhar, Jhabua, Khargaon and Ratlam districts of Madhya Pradesh. They use various devices and techniques for fishing, like nets, hooks, baskets of various shapes made up of bamboo, burning rags tied on sticks to trap fishes at night, blasting below water surface, etc. The use of piscicidal plants has been a very common method, which is an eco-friendly tribal method of fishing. The paper presents information about 17 piscicidal plants used by Bhil tribals.
1516. **Saxena, A.P. 1983.** *Studies on some medicinal plants of Bundelkhand region with reference to their antimicrobial activity.* Ph. D. Thesis, Sagar University, Sagar, Madhya Pradesh (Unpublished).
1517. **Saxena, A.P. & Vyas, K.M. 1986.** "Antimicrobial activity of seeds of some ethno-medicinal plants". *J. Econ Taxon. Bot.* 8(2): 291–299. Abstract: The petroleum ether and ethanol extracts of seeds of 14 ethno-medicinal plants from Bundelkhand region were tested for their antimicrobial activity against human pathogenic fungi and bacteria. The data on the ethno-medicinal uses and antimicrobial activity are incorporated in the present communication.
1518. **Saxena, B.R., Koli, R.C. & Shukla, D. 2001.** "Some medicinal plants used in folk medicine in tribal areas of Madhya Pradesh". *J. Appl. Zool. Res.* 12(1-2): 184–186.
1519. **Saxena, H.O. 1986.** "Observations on the ethnobotany of Madhya Pradesh". *Bull. Bot. Surv. India* 28(1-4): 149–156. Abstract: Ethnobotanical observations were recorded during the floristic survey carried out in Madhya Pradesh for a period of over seven years. The interesting folk-uses, covering eighty eight species of vascular plants which are not recorded in the important published literature.
1520. **Saxena, H.O. & Shukla, C.S. 1971.** Medicinal plants of Patalkot (Chhindwara), M.P. *Tech. Bull. No. 13.* State Forest Res. Instt., Jabalpur, Rewa. Pp. 1–53.
1521. **Saxena, R. & AHIRWAR, J.R. 2017.** "Some folk-medicinal plants used by tribals in Ratapani Sanctuary of Raisen districts in Madhya Pradesh". *J. Trop. Forest.* 33(2): 28–31. Abstract: The present paper reports first-hand information gathered on 32 folk medicinal plants used by the tribals like, Gonds, Bhils, Sihariyas, etc. in Ratapani Sanctuary of Raisen

district in Madhya Pradesh for the treatment of various diseases and disorders.

1522. **Saxena, S.K. & Tripathi, J.P. 1989.** "Ethnobotany of Bundelkhand. I. Medicinal uses of wild trees by tribals inhabitants of Bundelkhand region". *J. Econ. Taxon. Bot.* 13(2): 381–389. Abstract: The present paper deals with the trees which are being used by the tribals of Bundelkhand region of central India for curing their diseases and relieving physical sufferings. Uses of 42 tree species covering 23 angiospermic families are discussed in the present communication with their vernacular names, families, botanical names, plant parts which are used medicinally, general properties and medicinal uses. The folk uses of the tree discussed here as original and it seems not to have been available elsewhere in the published literature. An index of diseases and uses is provided in the text.
1523. **Sebastine, K.M. & Bhandari, M.M. 1984.** "Some plants used as veterinary medicines by Bhils". *Int. J. Trop. Agric.* 2: 307–310.
1524. **Shah, N.C. & Singh, S.C. 1990.** "Ethno-medico-botanical studies in Madhya Pradesh, India- An appraisal". *Curr. Res. Med. & Arom. Pl.* 12(4): 201–217.
1525. **Shah, N.C. & Singh, S.C. 1990.** "Hitherto unreported phytotherapeutical uses from tribal pockets of Madhya Pradesh, India". *Ethnobotany* 2(1): 91–95. Abstract: Data on hitherto unreported medicinal uses of 24 plant species from this region are presented. The plants have been discussed under various diseases, disorders and dysfunctions. Five species are recorded under skin diseases and disorders; three each for tonic and aphrodisiac and in menstrual disorder; two each as febrifuge and refrigerant, in gastrointestinal disorder, body injury, respiratory disorder and as antirheumatic; one each for pain, as antidiabetic and in urinary disorders.
1526. **Shaikh, M., Roy, S. & Mehra, S.S. 2012.** "Ethno-medicinal trends of Fabaceae in East Nimar (M.P.) India". *J. Trop. Forest.* 28(3): 68–71. Abstract: An account of 22 ethno-medicinal plants species belonging to 22 genera of family Fabaceae from East Nimar (M.P.) has been given in this paper. Information on the ethno medicinal uses, dosages, mode of administration, location is provided.
1527. **Shakya, Vijay Singh & Ahirwar, Ramesh Kumar. 2015.** "Some ethnomedicinal perceptions of tribal communities of district, Tikamgarh, Madhya Pradesh, India". *Int. J. Curr. Microbiol. Appl. Sci.* 4(8): 83–87. Abstract: Tikamgarh is a rich in ethnic and biological diversity since ancient times. Several tribal communities like Kol, Gond, and Mawasi inhabit Tikamgarh region and utilize wide variety of plant resources for food, fodder, fiber, medicine etc. An ethnobotanical study among the tribal communities of Tikamgarh has been carried out during 2011–2012. In the study, ethno medicinal uses of 19 plant species have been reported. The plant parts most commonly used in the treatment of various diseases are root, leaves, whole plant and bark. Mode of drug administration in different ailments is discussed.

1528. **Shankar, R.& Khare, P.K. 1992.** "Ethnobotanical observations on some ferns of Pachmarhi hills". *J. Econ. Taxon. Bot., Addit. Ser.*10: 97–100. Abstract: About 58 species of fern allies are reported from Pachmarhi hills out of which the medicinal uses of 12 species viz., *Abacopteris multilineata*, *Adiantum capillus-veneris*, *A. philippense*, *Cheilanthes farinose*, *C. tenuifolia*, *Cyathea gigantean*, *Dicranopteris linearis*, *Diplazium esculentum*, *Dryopteris cochleata*, *Hypodematium crenatum*, *Nephrolepis cordifolia* and *Tectaria macrodonta* prevalent amongst the tribes like Bharia, Bhil, Gond, Korku, Mavasi and others have been described. The paper also compares the present information with earlier ethnobotanical reports about these plants from other parts of the country and abroad.
1529. **Shankar, R.& Khare, P.K. 1994.** Ethnobotanical studies of some ferns from Panchmarhi hills. In: Gupta, B.K. (ed.), *Higher Plants of Indian Subcontinent*. Vol. III (*Indian J. Forest., Addit. Ser.* VI). Bishen Singh Mahendra Pal Singh, Dehra Dun. Pp. 289–294. Abstract: The paper deals with the ethnobotanical studies of 12 fern species, viz., *Dicranopteris linearis* (Retz.) Sw., *Adiantum capillus veneris* L., *A. philippense* L., *Cheilanthes farinose* (Fossk.) Kaulf., *C. tenuifolia* (Burm.) Sw., *Nephrolepis cordifolia* (L.) Pr., *Hypodematium crenatum* (Forsk.) Kuhn, *Dryopteris cochleata* (Don) C. Chr., *Tectaria macrodonta* (Fee) C. Chr., *Abacopteris multilineata* (Wall.) Ching, *Diplazium esculentum* (Retz.) Sw. And *Cyathea gigantean* (Wall. ex Hook.) Holt. which are used by tribes of Pachmarhi hills of Madhya Pradesh. These plants are used by the tribes of this area as food and also cure of various ailments.
1530. **Sharma, A., Patel, V.K.& Ramteke, P. 2008.** "Shigelloidal activity of some medicinal plants used in folklore remedies by tribals of Mahakoshal region of central India". *Nat. Prod. Radiance* 7(5): 426–436. Abstract: The present study has been conducted to evaluate the shigelloidal activity of traditional folk medicine used by tribal people of Mahakoshal region in Central India for the treatment of infectious diseases. Shigelloidal activity was detected using disc diffusion assay and TLC bioautography. In the search for bioactive compounds, aqueous, ethanol, chloroform and acetone extracts of 25 Indian folklore medicinal plants were screened for shigelloidal property. The shigelloidal activity was observed in ethanolic extract of *Saraca asoca* (Roxb.) De Wilde syn. *Saraca indica auct non Linn.*, *Bacopa monnieri* (Linn.) Penn., *Zingiber officinale* Rosc., and *Terminalia chebula* Retz. with the MIC range of 5-10 mg/ml, 5-15mg/ml, 5-15mg/ml and 5-10mg/ml, respectively. While chloroform extract of *Pimpinella anisum* Linn. and *Azadirachta indica* A. Juss. showed shigelloidal activity with MIC range between 5-10mg/ml and 5-20mg/ml, respectively. The active antibacterial compounds analysed by bioautography, were further confirmed by High Performance Liquid Chromatography (HPLC). It is concluded that the crude chloroform extract of *P. anisum* (seed) containing saponin, exhibited maximum shigelloidal activity at 10mg/ml concentration with 8-12 mm inhibitory zone against all the isolates of *Shigella dysenteriae*. Thus, this plant can be used as potential source of natural antimicrobial against *Shigella dysenteriae*.

1531. **Sharma, A.K., Bajpai, S., Shrivastava, S. & Kanungo, V.K. 2014.** "Inventorying medicinal plants in urban homegardens of Raipur, Chhattisgarh". *Int. J. Herbal Med.* 2(1), Part A: 53–50. Abstract: A Survey was conducted in 100 homegardens in urban area of Raipur, Chhattisgarh for inventorying medicinal plants. Homegardens are man managed ecosystem of varying size start from 100 sq feet to 10000 sq feet recorded during the present study. Majority of the plants grown by the homegarden owner are cultivated plants, however some of them are exotic and endemic plants. These homegardens are manmade system, hence, subsidiary influx of the water and minerals was observed. Homegardens are significant means of *ex-situ* conservation and a repository of many of the rare medicinal and endangered plants. In present investigation inventorying of Homegardens was done in reference of medicinal plants grown and their importance as a medicine in treatment of various ailments. Present study recorded 168 medicinal plants in survey of 100 homegardens of Raipur, Chhattisgarh. Out of 168 plants maximum plants (127) belonged to the families of class dicotyledonae, while, 38 plants belonged to the families of class monocotyledonae, only 01 plant belonged to the group of Pteridophyta and 2 belonged to the Gymnosperm. Maximum number of plants 13 each belonged to the family Fabaceae and Euphorbiaceae, while minimum number of plant (01) belonged to the 44 families of class Dicotyledons and Monocotyledonae. Medicinal plants growing in the homegarden were consist of medicinal value to treat ailments like diabetes, rheumatism, bronchitis, jaundice, menstrual problems, diarrhoea, epilepsy, hypertension, cancer, hepatitis, leprosy, gonorrhoea, tuberculosis, influenza, leucorrhoea, syphilis, cholera, malaria etc. The plant part used as medicine was found to be root, rhizome, stem, bark, leaf, fruit and seed however, the largely used part of the plant was noted as leaf (84) used as medicine. In this way homegardens are proved to be an effective means of medicinal plants conservation and this hobby of human beings can be used as protection and conservation of many of the rare plants.
1532. **Sharma, A.N.&Sharma, N.M. 2000.** "Indigenous health practice related to fever among Bharias of Patalkot, M.P.". *Tribal Health Bull.*6(1): 6–10. Abstract: The present investigation is to study the possible aspects of indigenous health practice related to fever among Bharias of Patalkot. The seventeen herbal formulae are practiced and effective in fever among Bharias of Patalkot. The use of these items also depends on the availability of herbal and symptoms of fever.
1533. **Sharma, D.C. & Chandra, U. 1998.** "Prophylactic uses of some medicinal plants in Bastar district of Madhya Pradesh". *Ancient Sci. Life* 17(4): 284–289. Abstract: The present ethnobotanical exploratory study embodies the folk medicinal uses of certain important medicinal plants by tribals of Bastar district in Madhya Pradesh state of India. Twenty seven medicinal plants from diverse families have been covered being therapeutically used against different diseases such acidity, debility, diabetes, male

and female weakness, fistula, migraine and skin diseases etc. How the tribal folks consider the mode of drug administration and application in different ailments has been ailments has been elaborately emphasized.

1534. **Sharma, H.O. 1991.** *Ethnobotanical studies of Sahariya tribe of Chambal division with special reference to Morena district.* Ph.D. Thesis, Jiwaji University, Gwalior, M.P. (Unpublished).
1535. **Sharma, H.O. & Sikarwar, R.L.S. 2001.** The Socio-Economic Status of Sahariya Tribe of Madhya Pradesh. In: Sahu, Chaturbhuj (Ed.) *Indian Tribal Life.* Sarup & Sons, New Delhi. Pp.135–146.
1536. **Sharma, J., Varma, R. & Varma, A. 2012.** “Ethno-botanical studies of *Mallotus phillippensis* (L.) Mull.Arg. on tribes of Bhopal, Madhya Pradesh, India”. *Int. J. Med. Aromat. Pl.* 2(3): 434–446. Abstract: In the present study *Mallotus phillippensis* (L.) Mull.Arg. are used by tribal’s of Bhopal district for curing several diseases like skin diseases, cough, snake bite, mosquito repellent, diarrhoea, etc. The impact of modernization and commercialization of medicinal treatment has telling effect on the number of these uses and so proper documentation and preservation of these practices are essential. This is the cause of reduction of regeneration, less population and production of this useful medicinal plant. *Ex-situ* conservation aspects and management of *Mallotus phillippensis* in the natural forest was discussed in the paper.
1537. **Sharma, L. & Shivhare, U. 2014.** “Edible and ethnomedicinal wild plants and products used in children diseases among tribals of Bilaspur district (C.G.)”. *Life Sci. Bull.* 11(1): 19–20. Abstract: India with her ethnobotanical and phytogeographical diversity provides enormous scope for ethnobotanical studies. Various ethnic groups inhabiting in different regions still use wild plants from their natural habitants for medicine and food in particular. Several researchers have written specially about medicinal plants and food plants as part of their studies. There are specific mention about the medicinal plants used in children diseases. Some common children diseases are blood dysentery, amoebiosis, constipation, diarrhoea, teething, eye disease, intestinal worms, fever, cough, cold, polio, jaundice, small pox, measles etc. The target age group covered in the present study is from newborn baby to children below ten years. There is an urgent need for developing a long term strategy for systematic preparation and monitoring of the edible and ethnomedicinal wild plants and their products which are used in different types of children diseases among tribal groups of Bilaspur district. In this district edible and ethnomedicinal wild plants like *Ageratum conyzoides*, *Cassia tora*, *Phyllanthus niruri*, *Alternanthera sessilis*, *Asparagus racemosus*, *Eclipta prostrata* etc. are used frequently. The present study has brought out to light traditional and new indigenous knowledge on edible and ethnomedicinal wild plants as practiced by tribal for treating and controlling the children diseases. The tribal populations of Bilaspur district are highly dependent on

the medicinal plant therapy for meeting their health care needs. There is an urgent need to formulate some effective herbal medicinal preparations either with single plant or in combination with different plants after clinical trials for effective treatment and control for children diseases.

1538. **Sharma, L. & Shivhare, U. 2014.** "A study of awareness of edible and ethnomedicinal herbs of Masturi block of Bilaspur district (C.G.)". *Life Sci. Bull.* 11(1): 37–40. Abstract: Bilaspur district has large tribal population of Gond, Baiga, Kanwar, Agharia, Moria, Binjhar etc. These tribal people are very close to nature. Surrounding of natural vegetation is very much a part of their lives, even today they utilize to a great extent indigenously for the treatment of various ailments for their health and wealth. Early 19<sup>th</sup> century was a turning point in the knowledge and use of edible and medicinal plants. In late 19<sup>th</sup> and early 20<sup>th</sup> centuries, there was a great danger of elimination of medicinal plants from therapy. The current status of edible and medicinal plants used by traditional Vaidyas was studied in Chhattisgarh state of India. Information was gathered using semi-structured questionnaires among 60 traditional vaidyas. They were questioned about the types of ailments treated with plants and the preparation of herbal medicinal formulation by local villagers. There was a sharp decline in the number of traditional Vaidyas through generations. The loss of knowledge on preparing medicine was due to several reasons including the less number of Vaidyas coming forward to adopt this traditional healing practice professionally. This paper aims at discuss how a few additional efforts can use edible and ethnomedicinal herbs. During the present study through a general survey of this site 26 edible species, 73 medicinal herb species belonging 59 genera and 28 families were obtained. They have great medicinal and economical importance in most tribal areas and villagers of Masturi block of Bilaspur district. *C. tora*, *M. denticulata*, *O. latifolia*, *L. aspera*, *I. palmata*, *A. viridis* etc. were edible species and some ethno medicinal herbs were *C. iria*, *C. dactylon*, *P. niruri*, *A. aspera*, *S. indicus* etc.
1539. **Sharma, M., Sharma, R.P. & Sharma, A. 2017.** "Ethnomedicinal edible wild plants of Pendra Road, forest region of Chhattisgarh". *Int. J. Bot. Stud.* 2(3): 29–33. Abstract: Pendra Road forest region is lies between 22°44'55" North latitudes and 81°54'43" east longitudes. The main forest is Sal, Saza, Khamhar, Haldi, Sagoun, Shisham, Neelgiri, Harra, Bahera, Char, Tendu, and Palash. Mostly people of this area are inhabited tribes and villages. Gond, Kanwar, Binjhar, Bheel, Bhunjia, Bhaina, Korwa etc are inhabited tribe in this region. They are closely attached to plant for their food and medicinal requirement. Mostly tribe used many edible wild plants for ethnomedicinal purpose to cure different disease such as asthma, fever, bronchitis, skin disease etc. during extensive field survey indicate more than 49 edible wild plants are useful to cure different disease. The paper deal various wild edible plants used by local inhabitants for cure their disease.

The knowledge are collected by local medicine men called vaidya are Baigas. This type of study is helpful to promote the ethnomedicinal knowledge of edible plants.

1540. **Sharma, P.K. & Singh, D. 1988.** "Ethnobotanical studies of some common plants in Kanker range, Bastar". *Geobios, New Rep.* 7(1): 69–71.
1541. **Sharma, R. 2016.** "Medicinal plant diversity in Bhilai city district, Durg, Chhattisgarh, India". *Int. J. Pharm. Life Sci.* 7(3): 4952–4966. Abstract: Chhattisgarh is a rich herbal state in India. The state is covered with 44.00% forest part. Present paper is conducted in Bhilai city; district Durg, Chhattisgarh, India. The study revealed the 198 plant species (86 herbs, 44 shrub, 61 tree, 7 climber) belonging to 69 families. A list of plant species along with their family, botanical name, common name, part used, medicinal uses with the help of available literature. Which indicate the heterogeneous floristic composition in the Bhilai city, District Durg, Chhattisgarh, India. Maximum species diversity was recorded, under the family Fabaceae. Herbaceous medicinal plants showed their maximum presence in the Bhilai City.
1542. **Sharma, R., De, K. & Upadhyay, S.D. 2007.** "Ethnobotanical knowledge of plants used by rural community of Waraseoni block of Balaghat district in Madhya Pradesh". *Fl. & Fauna* 13(2): 285–288. Abstract: An ethnobotanical survey on medicinal plants and their indigenous uses was carried out in Waraseoni block of Balaghat district in Madhya Pradesh. These areas are floristically rich areas where plants of various categories are growing spontaneously in their natural habitat. The rural community of this region uses some of the plants as medicine for the treatment of human ailments. In a floristic survey 25 ethnomedicinal plant species belonging to 19 families were recorded from this region. These medicinal plants are listed in alphabetically order of latin names, local name alongwith family and part used as medicine.
1543. **Sharma, R.K. 2017.** "Study of ethnomedicinal plants used by the Oraon tribe of Jashpur district (C.G.) India". *Int. J. Bot. Stud.* 2(6): 157–159. Abstract: Jashpur situated in the eastern side of the state Chhattisgarh, India. Jashpur is inhabited by a large number of tribes such as Oraon/Kurunkh, Nagesia, Kanwar, Birhor, Baiga, Paharia korwa and Munda, amongst which Oraon is the major tribe. Ethnobotanical survey was conducted among the Oraon tribe of Jashpur during 2014 to 2016. In the present study survey is being made to explore the use of medicinal plants for piles, bone fracture, diarrhoea, respiratory problems, polio, body swelling, backache, delivery problems, fever, paralysis, rangbaj (skin discolouration) for shock due to lightning, veterinary fracture, when children become unconscious due to fear or shock., oral diseases, blood purification, liver disorders and wounds by the aboriginals of the district.
1544. **Sharma, Vikas, Diwan, R.K., Saxena, R.C. & Shrivastava, P.N. 2010.** "Antimalarial plants of Sillevani valley of Chhindwara district (Madhya Pradesh)". *Ethnobotany* 22:

- 152–154. Abstract: Thirteen locally available plants of 12 families have been listed, which are used by the local people of Sillevani valley of Chhindwara district against malarial disease. Plant species are listed with their botanical names, family, locality, voucher specimen number, local names and parts used for the preparation of herbal drugs.
1545. **Sharma, V.K., Diwan, R.K., Saxena, R.C., Shrivastava, P.N., & Saxena, R. 2010.** “Survey report of medicinal plant used in folk medicine in tribal areas of Pandhurna, district Chhindwara (Madhya Pradesh)”. *Biomed. Pharmacol. J.* 3(2): 403–408. Abstract: 66 locally available plants of 40 families have been listed below which are used in folk medicine by the natives of tehsil Pandhura of district Chhindwara, M.P. The lists of the plants have been prepared in alphabetical order along with their local names and medicinal uses of each plant.
1546. **Shawl, H.Y., Tripathi, L. & hattacharya, S. 2004.** “Antidiabetic plants used by tribals in Madhya Pradesh”. *Nat. Prod. Radianc* 3(6): 427–429. Abstract: The history of diabetes dates back to centuries but no substantial success has yet been achieved in the development of permanent cure. Allopathic medicinal system is expensive, provides only symptomatic relief, fails to revert the body to normal state and the repercussions of long term therapy include severe side effects. To overcome these pitfalls, Alternative systems have come into limelight. In this article twenty two medicinal plants used by tribal people of Madhya Pradesh are enlisted for further exploration.
1547. **Shrivastava, A.2013.** “Ethnomedicine against jaundice used by Gond and Baiga tribes of Mandla district, Madhya Pradesh”. *Int. J. Pharm. Life Sci.* 4(9): 2963–2964. Abstract: Traditional medicines are still under practice in Indian villages and have been developed through experience of many generations. The present communication reports first hand information gathered on 16 plant species traditionally used by Gond and Baiga Tribes of Mandla District of Madhya Pradesh for the treatment of jaundice. Valuable information about the medicinal uses of certain plants against jaundice of the Gond and Baiga Tribes were obtained through personal interviews and collection. The botanical names, families, local name, and locality of these collections are also given along with medicinal uses.
1548. **Shrivastava, A.2013.** “Ethnomedicinal plants used for the treatment of gynaecological disorders by tribal of Dindori district of Madhya Pradesh”. *Int. J. Pharm. Life Sci.* 4(12): 3185–3189. Abstract: The present paper deals with the Ethno medicinal plants used by the tribes of Dindori district. The tribals depend on the herbal medicines for curing various gynecological disorders. Tribal do not approach doctors due to lack of awareness and shyness or hesitation. Herbal healers and their patients who receive the treatment for any gynecological complication enquired the local names, parts used and method of administration. The binomial names are enumerated with utilization of these plants. Further



studies were suggested to validate the claims and herbal drug development for treatment of such disorder.

1549. **Shrivastava, A.K., Bansode, P. & Patra, S. 2018.** "Plants used by tribal people of Chhattisgarh for gynaecological disorders". *Indian J. Appl. Pure Biol.* 33(1): 63–73. Abstract: The tribal communities of Chhattisgarh partially or completely depend on forest produces for their survival. Plants and herbs are commonly used by tribal women to get relief from the gynecological problems they generally face. Total 19 gynecological problems were seen to be treated by the traditional method using different formulation of plant parts. These plants were identified and they were classified to 49 families, 79 genera and 87 species. In terms of number of species Fabaceae>Euphorbiaceae= Moraceae > Mimosaceae > Solanaceae = Asteraceae = Caesalpiniaceae = Liliaceae = Verbenaceae. The plant parts which are used in different formulations are whole plant Root/Rhizome> Bark > Flower/Fruit > Stem > Leaf > Seeds.
1550. **Shrivastava, A.K., Patra, S. & Chauhan, D. 2017.** "Biochemical studies of weed plants used as leafy vegetables by tribes and people of Chhattisgarh with special reference to the secondary metabolites confer nutraceutical properties". *Indian J. Appl. Pure Biol.* 32(1): 19–25. Abstract: Wild edible plants not only provide food and fodder but also make significant contribution to the nutrition requirements life forms throughout the year. Leafy vegetables are the major sources of the nutritional components of the tribal and local population in remote parts of the Chhattisgarh. In present study photochemical screening of eight wild leafy vegetables i.e. *Amaranthus viridis* L., *Boerhaavia diffusa* L., *Cassia tora* L., *Cleome viscosa* Linn., *Corchorus trilocularis* Linn., *Ipomoea aquatica* Frosk., *Oxalis corniculata* L., *Portulaca oleracea* Linn.; commonly consumed by the tribal and local people of Chhattisgarh. The results of the study showed that all the selected wild leafy vegetables contain tannins. Moreover, alkaloids and flavanoids were also present in all the selected plants except *Oxalis corniculata* and *Cleome viscosa*, respectively. On the other hand, saponins were absent in *Oxalis corniculata* and *Cleome viscosa*. Terpenoids were present in *Amaranthusviridis*, *Boerhaavia diffusa*, *Cleome viscosa*, *Portulaca oleracea*. However, Glycosides were found absent in *Corchorus trilocularis*, *Portulacaoleracea* and *Cleomeviscosa*. The overall results revealed that *I. aquatica* possessed the highest nutritional value and *A. viridis*, *B. diffusa* are rich in majority of phytochemical classes of compounds. Comparatively however, *Oxalis corniculata* shows lowest nutritional and therapeutic potential due to the absence of majority of phytoconstituents.
1551. **Shrivastava, A.K., Patra, S. & Tikariha, A. 2016.** "Uses of weeds as medicine in Durg district of Chhattisgarh". *Indian J. Appl. Pure Biol.* 31(1): 91–104. Abstract: Survey done in 2012–2013 and 2013–2014 in Durg district of Chhattisgarh state showed the biodiversity of different weeds. About 21 families with 42 genera and 46 species were studied. Out of which, 43 weeds belonged to 20 families of Angiosperms having medicinal

properties. Among them, 07 belonged to monocot where as 36 belonged to dicot group. They were reported to be used in treating various diseases. Chhattisgarh is rich in biodiversity, having wild as well as cultivated plant of the weeds are allergenic, poisonous and harmful to mankind, while the others have medicinal value.

1552. **Shrivastava, J.L., Jain, S. & Dubey, A. 1999.** "Ethno-medicine used by the tribals in Bastar district of Madhya Pradesh". *J. Econ. Taxon. Bot.* 23(2): 297–300. Abstract: A survey of tribal villages of Bastar district was conducted in order to identify medicinally important plants used by tribals in the region. Paper deals 20 preparations of herbal medicines used by the tribals of Bastar district of Madhya Pradesh for antifertility and abortification. The mode of preparation of herbal drugs and method of their administration along with doses were discussed in this paper.
1553. **Shrivastava, M. 2015.** "Important ethnomedicinal plants used by the Muria tribes of Bastar for the treatment of snake bite". *Indian J. Appl. Pure Biol.* 30(2): 165–168. Abstract: Ethnomedicinal study have received desired attention during last 2-3 decades. A large number of tribal population of Bastar is living in forest pockets. The tribal of Bastar depend on their traditional healing system for there health care. The tribals are the main source of information on ethnomedicinal plants. This indigeneous knowledge is being transferred from geeneration to generation in the tribal community. During last few decades, several new drugs have been discovered from the sources of aboriginal societies. The information about medicinal plants among the tribal people must be tapped before it disappears. Bastar the biggest district of Chhattisgarh is peopled by many tribes. The present study deals with some ethnomedicinal plants used for the treatment of snake bite by Muria tribe Bastar, Chhattisgarh.
1554. **Shrivastava, M. 2016.** "Study of some wild edible plants of Bastar district with special reference to Muriya tribes". *Indian J. Appl. Pure Biol.* 31(1): 23–26. Abstract: Tribal people are undoubtedly the repository of accumulated experience and knowledge of vast indigenous flora and fauna. Bastar is the biggest district of Chhattisgarh (former Madhya Pradesh) is populated by many tribes but the Muria tribe has got its own importance. The present study includes 34 wild edible plants of Bastar district which are used as food by Muria tribe of the district.
1555. **Shrivastava, N.K. 2012.** "Observations on certain plants used as a source of medicine by the tribals of Panna district (M.P.) India". *Indian J. Appl. Pure Biol.* 27(1): 79–81. Abstract: The present paper deals with 15 medicinal plants used for different diseases in Panna district. The district has a rich source of medicinal plants and is inhabited by large population of tribals and backward classes of people viz., Gond, Kol, Sonre, Bhumia, etc. who uses various plants parts extensively for healthcare and other purposes.
1556. **Shrivastava, N.K. 2012.** "Plants used in digestive disorders by the Baiga tribes of Umaria district (M.P.)". *Indian J. Appl. Pure Biol.* 27(1): 101–103. Abstract: The present

study was conducted with 18 medicinal plants used for digestive disorders by Baiga tribes of Umaria district. The Umaria district has a rich source of medicinal plants. The large population of Baiga tribes uses various plants for health care and other purpose.

1557. **Shrivastava, R.K. 1985.** *Herbal remedies used by the Bhils of Madhya Pradesh*. Oriental Med. Kyoto, Japan. 389–392.
1558. **Shrivastava, S.& Kanungo, V.K. 2013.** “Ethnobotanical survey of Surguja district with special reference to plants used by Uraon tribe in treatment of diabetes”. *Int. J. Herbal Med.* 1(3): 127–130. Abstract: An Ethnobotanical survey was conducted in the Surguja district of Chhattishgarh, India, during the year 2011. Study was done in 10 villages of Surguja district involves various steps like field study in which 300 questionnaire was filled by the people of Uraon tribe and personal interview was conducted with 30 people in each village which included 15 male and 15 female people. Plant specimens were collected during the survey for the preparation of herbarium and identification of plants was done by following the flora of Haines and Hooker. In the present study 15 plant species belonging to 11 families were recorded, found to be used by Uraon tribe in Surguja district for the treatment of diabetes. The method of drug preparation, drug administration and cost per episode was also recorded during the survey. The results of the study revealed that people of Uraon tribes have rich knowledge of plants and are using the plants for their health security like in treatment of diabetes.
1559. **Shrivastava, S.& Kanungo, V.K. 2013.** “Ethnobotanical survey of Surguja district with special reference to plants used by Uraon tribe in treatment of respiratory diseases”. *Int. J. Herbal Med.* 1(3): 131–134. Abstract: Surguja district lies in the northern part of Chhattisgarh state is biodiversity rich area, dominated by tribal communities. The major tribes of Surguja region are Nagesiya, Baiga, Kanwar, Panika, Korwa and Uraon. Uraon is one of the dominating populations amongst all the tribes found in Surguja. In Surguja, the tribal's are 55.4% of the total population. The total forest area in the region is 18,188.44 sq. km constitute 44% of the total area of the district. The tropical deciduous type of forest is found in Surguja. The tribal communities have very rich knowledge of plants and it is used by them for their health and livelihood security. Many plants are used by them for the treatment of various diseases like diarrhea, jaundice, fever, headache, malaria and typhoid, cough and cold, diabetes, etc. In present study an ethno-botanical survey was carried out amongst the Uraon tribe in Surguja district for the documentation of herbal medicines used for the treatment of respiratory diseases. A total of 14 plant species were found to be used for the treatment of respiratory diseases. The drug was found to be extracted from whole plant, root, rhizome, leaves, flowers and seeds of the plant. The common drug preparation method was documented as making of plant parts in to powder and later converted in to tablets or preparing of decoction by boiling in water. The drug administration was noted to be oral with water/

milk or jiggery and cost per episode was also documented.

1560. **Shrivastava, S. & Kanungo, V.K. 2014.** "Ethnobotanical survey of Surguja district with special reference to plants used by Uraon tribe in treatment of diarrhoea". *Int. J. Herbal Med.* 1(5): 19–22. Abstract: Present study aims to explore the ethnobotanical information on medicinal plants used by meagre community of Uraon of Surguja district Chhattishgarh India. The study was carried out during different periods of the year 2009- 2011. Information's on plant and plant parts uses were collected interviewing key informants by using semi-structured questionnaire. Altogether 17 different plant species belonging to 14 families were documented and majority of them are tree. In terms of plant parts use, leaf and stem/bark are in top priorities. These plants are used to treat diarrhea.
1561. **Shrivastava, S., Jain, A.K. & Mathur, R. 2012.** "Documentation of herbal medicines used in treatment of diseases of Goat (*Cypris communis*) in and around Gwalior (M.P.)". *Indian J. Nat. Prod. & Resources* 3(2): 278–280. Abstract: The paper deals with various diseases of goats and their treatment through herbal medicines in and around Gwalior. A total of 21 diseases of goats are documented through field survey of the study area. Various recipes prepared by utilizing 23 herbs are reported in this paper.
1562. **Shrivastava, S., Jain, A.K. & Mathur, R. 2015.** "Documentation of some ethnoveterinary practices at Gwalior district, Madhya Pradesh in India". *J. Ethnobiol. Tradit. Med.* 124: 974–977. Abstract:
1563. **Shrivastava, S., Dwivedi, S., Dubey, S. & Kapoor, S. 2007.** "Traditional herbal remedies from Madhya Pradesh uses as oral contraceptives— A field survey". *Int. J. Green Pharm.* 1(1): 18–22. Abstract: A survey of Madhya Pradesh, India was conducted to record the plants used as oral contraceptives, which are well known in the tribal pockets, are mentioned in the present paper. The rural, tribal and aboriginal peoples of Madhya Pradesh utilize a number of medicinal plants for oral contraceptives. Population is the most inflammable problem due to the existing overwhelming growth rate of the world. Herbal oral contraceptives become need of time because of serious adverse effects produced by synthetic oral contraceptives. This forces us to investigate and identify the plants having antifertility activity. A detailed survey was carried out by the authors to collect information on both reported and unreported medicinal plants of this region. Further research on modern scientific line is necessary to improvise their efficacy, safety and validation of the traditional knowledge.
1564. **Shrivastava, S., Jain, A.K., Mathur, R. & Shrivastava, H.S. 2010.** (Herbal formulations used by rural people in Gwalior district (Madhya Pradesh) for the treatment of common diseases of Buffalo (*Bos bubalvus*)). *Ethnobotany* 22: 145–148. Abstract: Present study deals with commonly observed ailments and diseases of buffalo (*Bos bubalvus*) of Gwalior district. Thirty five disorders were identified, of which 27 have been categorised as most commonly occurring diseases of buffalo in and around Gwalior district. These ailments

are treated and managed with local herbal recipes and formulations by veterinary practitioners, milkmen and farmers.

1565. **Shriwas, S. & Dwivedi, S. 2016.** "Traditional phytotherapy used in the treatment of digestive disorders among tribes of Malwa region (Indore) of Madhya Pradesh". *Int. J. Pharm. Life Sci.* 7(10-11): 5330–5331. Abstract: Malwa region (Indore) of Madhya Pradesh sustains a very rich traditional medicinal plant wealth and inherits unique plant and animal communities. The present paper enumerates traditional phytotherapy used in the very common diseases of tribes i.e., digestive disorders. An exhaustive ethnomedicinal survey was made for the collection of the various medicinal plants and their data's in respect were presented in this paper. The herbs viz., *Aegle marmelos* (L.) Corr., *Acorus calamus* L., *Cassia angustifolia* Vahl., *C. fistula* L., *Calonyction muricatum* G. Don., *Curcuma longa* L., *Foeniculum vulgare* Mill. and *Mentha arvensis* L. etc. were identified, their method of preparation, dose and duration along with parts used has been mentioned in the present paper.
1566. **Shulka, A.N., Sikarwar, R.L.S. & Singh, K.P. 2009.** Observations of Plants of Achanakmar-Amarkantak Biosphere Reserve and their Ethnomedicinal uses. In: Trivedi, P.C. (Ed.) *Indigenous Ethnomedicinal Plants*. Pointer Publishers, Jaipur. Pp. 157–171.
1567. **Shukla, A.N., Singh, K.P. & Kumar, A. 2007.** "Ethnoveterinary uses of plants from Achanakmar-Amarkantak Biosphere Reserve, Madhya Pradesh and Chhattisgarh". *J. Non-Timber Forest Prod.* 14(1): 53–55. Abstract: The paper deals with ethnoveterinary uses of 17 wild plant species belonging to 17 genera and 14 families. These therapeutic information's were gathered from tribal communities residing in the remote villages within Achanakmar-Amarkantak Biosphere Reserve in the state of Chhattisgarh and Madhya Pradesh. Out of 17 ethnoveterinary uses recorded, 12 were found to be new uses as far as curing various ailments in domestic animals are concerned.
1568. **Shukla, A.N., Srivastava, Sharad & Rawat, A.K.S. 2010.** "An ethnobotanical study of medicinal plants of Rewa district, Madhya Pradesh". *Indian J. Tradit. Knowl.* 9(1): 191–202. Abstract: The ethnobotanical exploration study presents the folk medicinal uses of certain plants by tribes of the Rewa district in the Madhya Pradesh state. One hundred and sixty six plants from 69 families, which are therapeutically, used against different diseases, such as cough, cold, dysentery, diarrhoea, ulcers, diabetes, male and female weakness, snake-bite and skin disorders are covered. Part of the plants used, mode of drug administration in different ailments are discussed.
1569. **Shukla, B.K. & Brijlal. 1991.** "Ethnobotanical studies among the Baigas of Mandla district, Madhya Pradesh, India". *Vanyajati* 34(3): 21–30.
1570. **Shukla, K.M.L. 1996.** Ethnobotanical studies on the tribals of Bilaspur district with species reference to Korwa tribe. Ph. D. Thesis, A.P.S. University, Rewa, Madhya Pradesh (Unpublished).

1571. **Shukla, P.K. & Pandey, R.K. 1993.** "Tribal life and forests: a case study of selected forest village in Dindori, Tahsil of Mandla district in Madhya Pradesh". *J.Trop. Forest.* 9(4): .
1572. **Shukla, Rajesh&Harmukh, Neetu.2009.** "Folk medicinal claims for the treatment of arthritis in Chhattisgarh, India". *Tribal Health Bull.* 15(1&2): 26–30. Abstract: The present study aims to document the folk medicinal practices for the treatment of 'Arthritis' by various tribal and rural people of Raipur District of Chhattisgarh. The information was collected through interviews. Interviews were conducted with traditional healers and other elders of the community or village. Twenty six medicines were documented for the treatment of Arthritis and an attempt has been made to authenticate the claims from the literature of Classical Medical System. Botanical and vernacular names, parts used and mode of administration were systematically arranged. Preliminary screening was done with the help of the experts on Druvygun and Ras-shashtra to furnish scientific base for the claims.
1573. **Shukla, Rajesh, Goutam, M.P., Harmukh, Neetu&Shrivastava, Anil Kumar. 2008.** "Herbal medicine for the treatment of jaundice among the people of Chhattisgarh, India". *Tribal Health Bull.* 14(1&2): 45–49. Abstract:Plants have traditionally served as men most important weapon against pathogens. Herbal medicines are widely used by all sections of the community, either as folk remedies or as medicaments in the indigenous as well as modern system of medicine. The present work was performed to enumerate the medicinal herbs that tribes and rural people uses for the treatment of jaundice. Data were collected by interviewing local traditional therapists and tribes of the region. Our study revealed that all above herbs and their formulations have been used since quite a long time by the tribes and rural people and no side/adverse effects were reported.
1574. **Shukla, S. & Oommachan, M. 1994.** "Certain ethnobotanical observations from rural and tribal areas of Mandla and Jabalpur". *Indian J. Appl. Pure Biol.* 9(1): 41–47.
1575. **Sikarwar, R.L.S.1992.**"Ethnomedicines of North Surguja Forest Division, Ambikapur, Madhya Pradesh". *Aryavaidyan* 6(2): 97–100.
1576. **Sikarwar, R.L.S.1993.**"Ethnogaecological uses of plants by the tribals of Madhya Pradesh". *Vanyajati* 41(2): 28–31.
1577. **Sikarwar, R.L.S.1994.**"Wild edible plants of Morena district (M.P.)". *Vinyajati* 42(4): 31–35.
1578. **Sikarwar, R.L.S. 1996.** Ethnoveterinary herbal medicines in Morena district of Madhya Pradesh, India. In: Jain, S.K. (Ed.). *Ethnobiology in Human Welfare*. Deep Publications, New Delhi. Pp. 194–196.
1579. **Sikarwar, R.L.S. 1997.** "Ethnobotany of Sahariya tribe, Madhya Pradesh, India– A

- review". *Appl. Bot. Abstr.* 17(2): 129–140.
1580. **Sikarwar, R.L.S. 1997.** "Upliftment of the tribals of Sheopur Forest Division of Madhya Pradesh – Ways and Means". *Vasundhara* 2: 17–20.
1581. **Sikarwar, R.L.S. 2001.** "Ethnobotany of Madhya Pradesh, India". *Appl. Bot. Abstr.* 21(2): 133–147.
1582. **Sikarwar, R.L.S. 2002.** "Mahua [*Madhuca longifolia* (Koen.) Macbride] –A paradise tree for the tribals of Madhya Pradesh". *Indian J. Tradit. Knowl.* 1(1): 87–92. Abstract: Mahua (*Madhuca longifolia* (Koen.) Macbride, Family Sapotaceae), is a large deciduous tree, found in mixed deciduous forests of Madhya Pradesh. This state (including Chattisgarh) is very rich in ethnic as well as floristic diversity. The tribals constitute about 23.27% of the total population and 35% area out of total geographical areas is covered by forests. Most of the tribals still prefer to stay in and around the forests and depend wholly on the natural resources. They use several plants to fulfill their basic requirements like food, medicine, shelter, etc. Among the plants used, Mahua plays an important role in socio-economic life of tribal people. They use this plant for food, medicine, fodder, fuel, local drink and timber, etc. The present paper gives a detailed account with multifarious uses of Mahua tree.
1583. **Sikarwar, R.L.S. 2002.** "Utilization and conservation of medicinal plants in Narainpur, Chhattisgarh State, India". *J. Trop. Med. Pl.* 3(2): 213–218.
1584. **Sikarwar, R.L.S. 2012.** "Ethnobotanical Uses of *Prosopis cineraria* (L.) Druce in Morena district of Madhya Pradesh". *J. Econ. Taxon. Bot.* 36(1): 8–11.
1585. **Sikarwar, R.L.S. 2013.** "Ethnomedicinal uses of *Selaginella bryopteris* (L.) Baker in Chitrakoot". *J. Econ. Taxon. Bot.* 37(1): 101–105. Abstract: Study on ethnomedicinal uses of *Selaginella bryopteris* (L.) Baker, locally known as 'Kamraj', was carried out during 2009–2011 in Parikrama Marg of holy hill Chitrakoot (also called Kamadgiri), Satna district, Madhya Pradesh and first hand information collected from different herbal vendors is described in the present paper.
1586. **Sikarwar, R.L.S. 2014.** "Medicinal Plants of Chhattisgarh– Status and Conservation". *Heritage Amruth* 10(2): 33–36. (April 2014).
1587. **Sikarwar, R.L.S. 2014.** "Status and Conservation of Medicinal Plants of Madhya Pradesh". *Heritage Amruth* 10(2): 43–46 & 49 (April 2014).
1588. **Sikarwar, R.L.S. 2015.** "Herbal Vendors of Chitrakoot: The Unsung Heros. In: Kumar, Sanjeev (Ed.) *Recent Advances in Ethnobotany*. Deep Publications, New Delhi. Pp. 93–100.
1589. **Sikarwar, R.L.S. 2016.** "Plants used as medicine by traditional medicine men in Chitrakoot region of Madhya Pradesh, India". *J. Tradit. & Folk Practices* 2, 3, 4(1): 116–119.

1590. **Sikarwar, R.L.S. 2017.** "Retrospection of ethnoveterinary medicines of Madhya Pradesh, India". *J. Tradit. & Folk Practices* 5(1): 80–109.
1591. **Sikarwar, R.L.S. 2017.** Ethnic Diversity of Indo-Gangetic Region and Central India. In: Pullaiah, T., Krishnamurthy, K.V. & Bir Bahadur (Eds.) *Ethnobotany in India (Volume-5): The Indo-Gangetic Region and Central India*. Apple Academic Press, USA. Pp.19–58.
1592. **Sikarwar, R.L.S. & Kaushik, J.P. 1992.** "Traditional medicine among the rural folk of Morena district, Madhya Pradesh". *Ancient Sci. Life* 12(1-2): 274–279. Abstract: The present study carried out in the rural areas of Morena district of Madhya Pradesh, concerns the traditional use of indigenous herbal medicines against various diseases. Thirty medicinal plants have been mentioned along with their botanical name, families, local name, locality, medicinal use and field numbers.
1593. **Sikarwar, R.L.S. & Kaushik, J.P. 1992.** "Some less known uses of trees among the Sahariyas of Morena district, Madhya Pradesh". *Ethnobotany* 4: 71–74. Abstract: The Sahariya tribe inhabits southwest part of Morena district, Madhya Pradesh. They utilize many plants for medicinal purposes for their surrounding areas in the treatment of ailments and diseases. The present communication deals with 15 tree species used by Sahariya tribe.
1594. **Sikarwar, R.L.S. & Kaushik, J.P. 1993.** "Folk medicines of the Morena district, Madhya Pradesh, India". *Int. J. Pharmacogn.* 31: 282–287. Abstract: A floristic survey was carried out from 1986 to 1989 in the Morena district of Madhya Pradesh, one of the Central States of India. Information on 45 plants commonly used by local inhabitants for different ailments is recorded in this paper.
1595. **Sikarwar, R.L.S. & Kumar, Vivek. 2005.** "Ethno veterinary knowledge and practices prevalent among the tribals of Central India". *J. Nat. Remedies* 5(2): 147–152. Abstract: An ethno botanical study was conducted among the various tribal communities of central Indian states (Madhya Pradesh and Chhattisgarh) to document their ethno veterinary knowledge and practices prevalent among them since times immemorial. Material and methods: First hand information on ethno veterinary uses of plants was recorded through interviewing of old and experienced local veterinary doctors of different tribal groups. Result and discussion: During the study it was observed that they utilize about 35 plant species belonging to 22 families for treatment of various ailments and diseases of their domestic animals. The recorded uses were compared with published literature and found that uses of 15 plants are new and uses of other plants are found similar but they are used by different tribal groups of different states.
1596. **Sikarwar, R.L.S. & Maheshwari, J.K. 1994.** "Some unrecorded ethnomedicinal plants from Amarkantak plateau of Madhya Pradesh". *Bull. Tribal Res. Inst. Bhopal* 20(1&2): 19–22.



1597. **Sikarwar, R.L.S. & Painuli, R.M. 1992.** "Ethnobotanical importance of Family Cucurbitaceae among the Sahariyas of Madhya Pradesh". *Bull. Med.-Ethno-Bot. Res.* 13(3 & 4): 124–129.
1598. **Sikarwar, R.L.S. & Painuli, R.M. 1993.** "Studies on medicinal uses of plants by the Sahariya tribe of Madhya Pradesh". *Aryavaidyan* 7(1): 51–53.
1599. **Sikarwar, R.L.S. & Pathak, Bharat. 2007.** Diversity, utilization and conservation of medicinal plants of Chitrakoot Region. In Trivedi, P.C. (Ed.) *Ethnomedicinal Plants of India*. Avishkar Publishers, Jaipur. Pp.180–187.
1600. **Sikarwar, R.L.S. & Rajendran, A. 1997.** "Credibility of folk claims in South Central India". *Bull. Tribal Res. Inst. Bhopal* 25(2): 63–68.
1601. **Sikarwar, R.L.S. & Tiwari, Ashok Kumar. 2016.** "Ethnobotanical uses of *Trichosanthes tricuspidata* Lour. in Chitrakoot region, Madhya Pradesh". *Ethnobotany* 28: 68–70. Abstract: The present study is an attempt to document the ethnobotanical uses of climbing plant *Trichosanthes tricuspidata* Lour. belongs to the family Cucurbitaceae. It is found on trees and shrubs in forest areas of Chitrakoot region and utilized by local and tribal people for the treatment of various ailments and diseases. The recorded uses are compared with well known literature and found new, hence reported here.
1602. **Sikarwar, R.L.S. & Tiwari, Ashok Kumar. 2015.** "Ethnomedicinal uses of *Cucumis melo* L. var. *agrestis* Naud. in Madhya Pradesh". *J. Trop. Med. Pl.* 15(1&2):69–71.
1603. **Sikarwar, R.L.S. & Tiwari Ashok Kumar 2017.** "Ethnobotanical uses of *Trichosanthes tricuspidata* Lour. in Chitrakoot region, Madhya Pradesh". *Ethnobotany* 28:68–70.
1604. **Sikarwar, R.L.S., Bajpai, A.K. & Painuli, R.M. 1994.** "Plants used in veterinary medicines by aboriginals of Madhya Pradesh, India". *Int. J. Pharmacogn.* 32(3): 251–255. Abstract: An ethnobotanical field study was carried out during 1990 and 1991 in districts of madhya pradesh, a central state of India. It found that 31 species under 28 genera and 26 families are used by aboriginals to treat common ailments of livestock.
1605. **Sikarwar, R.L.S., Lal, Brij & Maheshwari, J.K. 2002.** "Traditional phytotherapy among the tribals in Raigarh district of Chhattisgarh". *J. Non-Timber Forest Prod.* 9 (1&2): 22–25. Abstract: The Raigarh is situated on eastern most part of Chhattisgarh, covering an area of 12,924 sq. km. This district is inhabited by a large number of tribes, namely, Oraons, Birhor, Gonds and Baigas. The ethnobotanical survey was conducted in tribal areas during the year 1990-1991. The first hand information regarding the ethnomedicinal uses was gathered from old medicine men who are actually using herbal medicines for meeting their health care needs. In the present paper, ethnomedicinal uses of 30 plants are given such as *Ardisea solanacea* Roxb. (cus wounds), *Arisaema tortuosum* (Wall.) Schott (constipation), *Bauhinia variegata* L. (veterinary diseases), *Cyperus rotundus* L. (stomachache) and *Lagerstroemia speciosa* (L.) Pers. (Small pox), etc. The data will be

useful to phytochemists, pharmacologists and herbal practitioners for detection of active principles to be used as green medicine for human welfare.

1606. **Sikarwar, R.L.S., Jaiswal, Anil & Chaturvedi, Archana 2004.** "Uses of some important medicinal plants of Chitrakoot region of Satna (M.P.)". *Natl. J. Life Sci.* 1(2): 349–352.
1607. **Sikarwar, R.L.S., Jaiswal, Anil & Kumar, Vivek. 2005.** "Medicinal uses of *Alectra chitrakutensis*". *J. Trop. Med. Pl.* 6(1): 93–97.
1608. **Sikarwar, R.L.S., Jaiswal, Anil & Kumar, Vivek. 2006.** "Medicinal uses of *Actinopteris radiata*". *J. Trop. Med. Pl.* 7(2): 279–282.
1609. **Sikarwar, R.L.S., Pathak, B. & Jaiswal, A. 2008.** "Some unique ethnomedicinal perceptions of tribal communities of Chitrakoot, Madhya Pradesh". *Indian J. Tradit. Knowl.* 7(4): 613–617. Abstract: Chitrakoot is rich in ethnic and biological diversity since ancient times. Several tribal communities like Kol, Gond and Mawasi inhabit Chitrakoot region, and utilize wide variety of plant resources for food, fodder, fibre, medicine, etc. An ethnobotanical study among the tribal communities of Chitrakoot has been carried out during 2002-2005. In the study, ethnomedicinal uses of 28 plant species belonging to 27 genera and 23 families have been reported. These uses are not reported in earlier published literature.
1610. **Sikarwar, R.L.S., Tiwari, Ashok Kumar & Pathak, Bharat. 2013.** "Ethnomedicinal uses of Van Kareli (*Momordica charantia* L.) in Chitrakoot region". *Life Sci. Bull.* 10(1): 57–59. Abstract: Van Kareli (*Momordica charantia* L., family Cucurbitaceae) is a common climber found in hedges and thickets of village surroundings during the rainy season. An ethnobotanical study in rural areas of Chitrakoot region was carried out and detailed information on ethnomedicinal uses of Van Kareli (*Momordica charantia* L.) was recorded with the discussions and interviews of old and experienced medicine men. The present paper deals with the ethnomedicinal uses of *Momordica charantia* L.
1611. **Sikarwar, R.L.S., Tripathi, Manoj & Pathak, Bharat. 2012.** "Ethnomedicinal plants sold by herbal vendors in the Kamadgiri Parikrama Marg in Chitrakoot (M.P.)". *Ethnobotany* 24(1&2): 114–118. Abstract: Kamadgiri (Chitrakoot hill) is situated on the border of the Satna district of Madhya Pradesh with Chitrakoot district of Uttar Pradesh, covering an area of 5 sq. km. And has been the abode of Lord Ram during 14 years of exile. An ethnobotanical study on medicinal uses of plants sold by the herbal vendors in Kamadgiri Parikrama Marg, Chitrakoot was carried out and first hand information was recorded. The study deals with ethnomedicinal uses of 14 plant species belonging to 14 genera and 14 families.
1612. **Sikarwar, R.L.S., Dubey, P.C., Khanna, K.K. & Tiwari, A.P. 2009.** Threat Assessment and Utilization of Medicinal Plants of Vindhyan Region of Madhya Pradesh. In: Trivedi, P.C. (Ed.) *Indian Medicinal Plants*. Avishkar Publishers, Distributors, Jaipur. Pp.184–195.

1613. **Singh, A. 2016.** "Medicinal plants used against joint diseases (rheumatism, arthritis and gout) in Rewa district of Madhya Pradesh". *Int. J. Bot. Stud.* 1(5): 9–10. Abstract: The present paper deals with 21 plants belonging to 21 genera, 16 family used against joint diseases rheumatism, arthritis and gout by the tribal and rural people of Rewa district. Their primary treatment of diseases is observation of nature and their understanding of traditional knowledge of medical practices. These plants are arranged alphabetically order with their family, local name(s), part(s) used and method of preparation are given in this paper.
1614. **Singh, A., Verma, S.K. & Singh, Y.P. 2013.** "Ethno-medicinally important plants from Chambal ravine region of Madhya Pradesh". *Bioinfolet- Quart. J. Sci.* 10(4a): 1186–1192.
1615. **Singh, A., Satanker, N., Kushwaha, M., Disoriya, R. & Gupta, A.K. 2013.** "Ethnobotany and uses of non-graminaceous forage species of Chitrakoot region of Madhya Pradesh". *Indian J. Nat. Prod. & Resources* 4(4): 425–431. Abstract: An ethno-botanical survey was conducted to assess the multipurpose utilization of available non-graminaceous forage species by the tribal of Chitrakoot region of Madhya Pradesh. Fifty two such species belonging to 39 genera of 8 families were collected, identified and preserved in herbarium section of Agriculture Botany Unit, MGCGV, Chitrakoot. The species are mainly utilized for forage purpose. Besides, these are also used as medicines (100%) and food (40%). Major uses of these species are green manure (27%), fuel wood (23%) and ornamental plants (23%). Some species are used as famine food (14%) and timber (10%). Minor uses of the species are for fiber (6 %), cosmetics (6 %), natural dye (4%) flavour & fragrance (2%) and basket making (2%). Medicinal properties of the collected species revealed that these 52 species are frequently used to treat about 109 various diseases of human beings and 5 diseases of livestock. Leaves are the most (62%) utilized part whereas aerial roots and cladode (2%) are least utilized part to treat ailments. Tribes and indigenous people of Chitrakoot have conserved these economically important plant species in various ways for their daily needs, health and aesthetic values.
1616. **Singh, B.P. & Upadhyay, R. 2012.** "Ethnobotanical importance of Pteridophytes used by the tribe of Pachmarhi, Central India". *J. Med. Pl. Res.* 6: 14–18. Abstract: The present study mainly focuses on the ethno-botanical importance of Pteridophytes which are widely used by the people of the tribe of Pachmarhi, India. As many as 31 pteridophytes plants species belonging to 16 families are presented in this research article. The botanical name, synonyms, family name, local name, habit, part used, and their ethno-botanical uses are provided. The local people of Panarpani, Badkachhar, Rorighat, Matkuli, Pagara, Bariam, Amkhedi, Neemghan, Singanama, Tekapar, Chaka, Pisua, Monhgaun, Kadari, Binoura, and Kherghat were interviewed in this study.

1617. **Singh, B.P. & Upadhyay, R. 2014.** "Medicinal pteridophytes of Madhya Pradesh". *J. Med. Pl. Stud.* 2(4): 65–68. Abstract: The present study mainly focuses on the Medicinal Pteridophytes are widely used by tribal/Rural people of the Madhya Pradesh. As many pteridophytes plant species belonging to many types of medicine are presented in this research article. The Botanical name, distributions and Medicinal uses are provided. Satpura Hills, Amarkantak, Asirgarh Hills, Jabalpur, Mandla, Chhindwara, Rewa region, Sidhi and Sagar were interviewed in this study.
1618. **Singh, C.S. & Ray, S. 2014.** "Ethnoveterinary plants used for wounds healing by Bhil, Bhilala and other tribes for Alirajpur district, Madhya Pradesh". *Int. J. Sci. & Res.* 3(12): 2752–2755. 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.
1619. **Singh, C.S. & Ray, S. 2015.** "Ethnoveterinary plants used for increasing of lactation by tribals of Jhabua district, Madhya Pradesh, India". *Int. J. Pl. Animal & Environm. Sci.* 5(4): 170–171. Abstract: Present study confined to Jhabua districts. Tribal's are densely populated in the study area. Bhil, Bhilala, Barela and Pateliya are the dominant tribes inhabiting in Jhabua District of Madhya Pradesh. Ethnoveterinary survey of plants was carried out in the year 2010-2014. Present paper deal with 20 plant species and 19 genera belong to 14 families.
1620. **Singh, D.P., Dubey, A.P. & Sapra, M. 1985.** "Economic viability of Rosha grass cultivation in Agro-Forestry Programme of Malwa region of Madhya Pradesh". *J. Trop. Forest.* 1(3): 246–252. Abstract: Rosha grass (*Cymbopogon martini* Roxb.) is collected by tribals from natural forests of Malwa and Nimar regions of western Madhya Pradesh for distillation of a refined product known in trade as Palmarosa oil. However, the pace of destruction of forests in this tract has been very fast and as a result, many progressive farmers have taken up the cultivation of Rosha grass alongwith agricultural crops. Rosha grass holds a great promise for being introduced on the fields of tribals who have been collecting it from natural forests and distilling palmarosa oil in the past. The present paper briefly describes the economic liability of Rosha cultivation as part of agro-forestry programme.
1621. **Singh, Girja Kumar & Ahirwar, R.K. 2015.** "Uses of plant conservation by the tribes of Amarkantak district, Madhya Pradesh, India". *Int. J. Sci. & Res.* 4(2): 2188–2190. Abstract: The present paper deals with 30 plants species which are conserved by the tribes of Amarkantak district Anuppur Madhya Pradesh. Due to destruction of habitat, biotic interference and indiscriminate exploitation of natural plants, many valuable plant

species of this area are fast disappearing. Aborigines conserve these species by faiths, myths, taboos and religious aspects.

1622. **Singh, Girja Kumar & Ahirwar, R.K. 2015.** "An ethnobotanical survey for certain wild edible plants of Chanda forest district Dindori Central India". *Int. J. Sci. & Res.* 4(2):1755–1757. Abstract: The present paper highlights in Chanda forest district Dindori, Madhya Pradesh about 34 wild edible plants species which provide food and vegetables to inhabiting tribals. The data collected have been pooled and present in tabular form and they have been collecting various types of plants for food, fodder, fuel, medicine etc., and Chanda forest represents a diversity of ecosystem, communities and species. The inhabitants have much percentage of Baiga tribes.
1623. **Singh, Girja Kumar & Ahirwar, R.K. 2015.** "Documentation of some ethnobotanical wild edible plants of Bandhavgarh National Park, district Umeria, Madhya Pradesh, India". *Int. J. Curr. Microbiol. Appl. Sci.* 4(8): 459–463. Abstract: Present paper highlighted to collect and record the folklores pertaining to the food utility of 38 plants species and 25 families of Angiosperms. The botanical names followed by local names and along with parts used are furnished. The tribal sects of Central India use under normal monsoon conditions, more or less the same food grains as that of civilised people of the society. The food grains include *Avena sativa*, *Vicia sativa* etc. However, during the time of scarcity and famine they utilise other wild plants.
1624. **Singh, K.K., Anand Prakash, & Polvi, S.K. 1999.** "Observations on some energy plants among the tribals of Madhya Pradesh". *J. Econ. Taxon. Bot.* 23(2): 291–296. Abstract: The forests of Madhya Pradesh are quite rich in raw materials for timber, firewood, medicinal and other economic plants and plant products. A large number of tribal and rural population of M.P. are dependent on the forest resources of the state for fuelwood and charcoal. They collect and utilize many wild woody shrubs and trees from their surroundings forests for fuelwood purposes. Traditional and local information were gathered on wild biomass energy resources from the forests of Madhya Pradesh utilised by them.
1625. **Singh, Lalji, Kasture, Jayant, Singh, U.S. & Shaw, S.S. 2011.** "Ethnomedicinal practices of tribals in Achanakmar Amarkantak Biosphere Reserve". *Indian Forester* 137(6): 767–776. Abstract: The study was conducted on documentation of utilization of products of plant resources by local inhabitants of Achanakmar Amarkantak Biosphere Reserve (AABR) district Bilaspur, Chhattisgarh. Twenty six tree species were found in the study site and their products were collected and utilized for domestic and commercial purposes. Tree species come under sixteen families and the abundance of families of tree species were in the order of Anacardiaceae, Combretaceae and Euphorbiaceae. The study revealed that the demand for tree species like *Buchanania lanzen* (Char), *Syzygium*

*cumini* (Jamun), *Emblica officinalis* (Aonla), *Aegle marmelos* (Bael), *Diospyros melanoxylon* (Tendu) and *Semecarpus anacardium* (Bhelwa) etc. has alarmingly increased in the recent past due to their multiple uses and commercial exploitation. Few useful tree species such as *Shorea robusta* (Sal), *Terminalia alata* (Saja), *Madhuca indica* (Mahua), *Diospyros melanoxylon* (Tendu), *T. chebula* (Harra), *T. bellerica* (Bahera), *Cleistanthus collinus* (Karra), *Semecarpus anacardium* (Bhelwa), *Syzygium cumini* (Jamun), *Lannea coromandelica* (Gunja) and *Anogeissus latifolia* (Dhawra) are observed in the area. The study emphasized to conserve and domesticate these tree species for improving the livelihood of local inhabitants.

1626. **Singh, M.P., Khan, A.A. & Khan, S. 2004.** "Medicinal plants of ethnobotanical importance curing jaundice from Maikal hills (Amarkantak), Shahdol district (M.P.), India". *Advances Pl. Sci.* 17(1): 41–44. Abstract: The paper deals with ethnobotanical uses of 26 antiviral hepatitis plant species occurring in Maikal hills of Shahdol district, Madhya Pradesh. More than a dozen plants are used in different parts of the state by natives like Baiga, Korku, Kotwar, Gond, Maria and Muria as remedy for this disease. Some of which are less known, but very effective.
1627. **Singh, P., Mauyra, S.K. & Nigam, G. 2014.** "An ethnomedicinal study of plants used for the treatment of various skin problems in the Sidhi district of Madhya Pradesh, India". *Biolife* 2(3): 880–884. Abstract: An Ethnobotanical study was made on the medicinal plants frequently used for the administration of skin problems in Sidhi district of Uttar Pradesh by traditional healers. The study revealed 30 species of plants belonging to 27 genera of 26 families. Leaves are the most frequently used plant part of ethnomedicinal species. It was also found that the ethnomedicinal plant species are over exploited in the study area. So there is urgent need to document ethnobotanical information before they get extinct and continuous efforts should be made to collect the information which will provide opportunity for future generation
1628. **Singh, P., Mauyra, S.K. & Nigam, G. 2015.** "Medicinal plants used for sexual and reproductive problems by Kol tribe in Sidhi district, Madhya Pradesh, India". *Int. J. Pharm. Sci. Rev. Res.* 30(1): 345–348. Abstract: System of traditional medicine practices is well used system both in developing and developed countries due to their natural origin. Ethnobotanical documentation is one way of capturing this traditional knowledge from the tribal people and traditional healers. An ethnobotanical survey was conducted on the medicinal plants frequently used for the administration of sexual and reproductive problems in Sidhi district, Madhya Pradesh by tribal healers. This paper deals with the medicinal uses of 29 plant species of 26 genera belonging to 21 plant species.
1629. **Singh, R. 2012.** "Ethno-medicinally important tree species in and around district Satna (M.P.)". *Life Sci. Bull.* 9(1): 193–196. Abstract: The natural plant heritage may be used

as an important tool in shaping the economical up keeping of the tribals, if managed in a proper way. Climate and topographic diversity of Satna district provides a variety of habitats for the luxuriant growth of potential medicinal species. About Fifty two ethno-medicinally important tree species belonging to 25 families were recorded with the help of tribal people and village medicine-men of district Satna. The study indicates that the traditional knowledge and culture is alive and well functioning in the remote area of our country. The survey of the area shows that the important plant species are declining at a faster rate because of overexploitation for their economic values and environmental disturbances.

1630. **Singh, R. & Bala, L.D. 2015.** "Ethnobotanical study of wild vegetables used by rural communities of Satna district, Madhya Pradesh, India". *Int. J. Res. Appl. Sci. & Engineering Technol.* 3(XI): 269–274. Abstract: The present paper deals wild vegetable plants was carried out during 2014-15 following standard ethnobotanical methods for documentation of underexploited, non-conventional, traditional and indigenous wild vegetables for further studies leading to sustainable utilization of these resources to overcome malnutrition in vegetarian diet. During present study 25 species belonging to 18 families have been documented. *Chenopodium album* is the most common and popularly used wild vegetable followed by *Ipomoea aquatica* and *Coccinea grandis* in the study area. Seven species are reported as wild vegetable for the first time in India. Leaves and young stem are used in majority of the cases. Only 56% wild vegetables used in the study area are easily available, it means 44% wild vegetables are threatened to be lost if not conserved properly. The highly endangered wild vegetables in the study area are *Abrus precatorius*, *Centella asiatica*, *Dioscorea bulbifera*, and *Solanum incanum*.
1631. **Singh, R. & Palta, Aruna. 2004.** "Foods and beverages consumed by Abujhmaria - A primitive tribe of Bastar in Chhattisgarh". *Tribal Health Bull.* 10(1&2): 30–37. Abstract: Study was conducted on Abujhmaria tribe living in Orcha Block (Narainpur Tehsil) of district Bastar in Chhattisgarh list of Abujhmaria families was prepared and 100 Abujhmaria families were selected randomly. A questionnaire developed by NIN was used to collect information on diet survey and socioeconomic status. It was found that they were consuming 3 meals a day and food intake was dependent mainly on availability of food. As they live in forest ecosystem their diet comprises of variety of unconventional foods viz., edible forms of flowers, fruits, tubers, reptiles, rodents and other flesh food available from the forest. Variety of foods and beverage consumed by them are Salphi, Pej, Landa, Red ant chutney etc. Alcohol plays a significant role in the social and religious life of Abujhmaria tribe.
1632. **Singh, R. & Sharma, A. 2001.** "Medicinal plants used for diarrhoea by tribal from Majhgawan block, district Satna, Madhya Pradesh". *Ethno-Med.* 5(3): 205–208.

1633. **Singh, R.S., Shahi, S.K., Kanwar, L., Soni, D.K. & Yadaw, R.K. 2017.** "Ethnomedicinal plant diversity of Belgahna region, Bilaspur district (Chhattisgarh)". *Int. J. Bot. Stud.* 2(5): 1–5. Abstract: Chhattisgarh state has an enriched diversity of plants. 44% of the total geographical area of the state is covered with forest. The forest of Chhattisgarh falls under two different types of forest i.e. Tropical dry deciduous forest and Tropical moist deciduous forest. It is very necessary to proper identification and documentation of diversity for conservation and sustainable utilization of flora. Since long time there is no ethnomedicinal work on this region. Therefore present studies have been taken to explore the ethnomedicinal plant diversity of Belgahna region. Present paper deals with the ethnomedicinal plants found in Belgahna region. Plants explorations have been done from December 2014 to December 2016. Collection, identification and preservation of specimens have been done as per standard method. A total of 67 species of 65 genera belonging to 40 families of angiosperms has been collected and identified from this region. Fabaceae was found most dominant family during this study. Trees are the dominant growth forms among herbs, shrubs and climbers.
1634. **Singh, S.& Singh, R. 2012.** "Ethnobotanical use of pteridophytes in reproductive health of tribal women of Pachmarhi Biosphere Reserve, Madhya Pradesh, India". *Int. J. Pharmaceut. Sci. & Res.* 3(12): 4780–4790. Abstract: This paper describes the utilization of pteridophytes for the treatment of various gynecological and other related problems by the indigenous women of Pachmarhi Biosphere Reserve in Madhya Pradesh. The present study reveals that 23 species of pteridophytes belonging to 15 families and 18 genera are traditionally used by tribal women of Korku, Gond, Bhabha, Bhil, Mauria, Maria, Paria, Bhatara and Baigas communities in gynecological problems which contribute about 18.66% of total pteridophytic diversity (134 species) of the area.
1635. **Singh, S.& Singh, R. 2014.** "Traditional uses of tree ferns among the tribes of Pachmarhi Biosphere Reserve (MP)". *Ethnobotany* 26: 111–115. Abstract: The present paper focuses on ethnobotany and conservation strategies of the tree-ferns in the Pachmarhi Biosphere Reserve (MP). The ethnobotanical information of 2 species of tree fern of genus *Cyathea* belonging to family Cyatheaceae was documented. They are extremely rare. The paper elucidated the new and interesting traditional uses of these plants. The local tribal consider tree fern as a sign of good luck. They are using its plant parts like rhizome, pith, fronds and spores for food, fodder, medicine, veterinary uses and ritual ceremonies. These plants are extracted widely along with the rhizome by the local traders resulting rarity of these species from the forest area. Therefore, it is essential to conserve these species by way of their cultivation and stopping wide extraction from the forest area.
1636. **Singh, S.& Singh, R. 2017.** "Ethnomedicinal use of pteridophytes in reproductive health of tribal women of Pachmarhi Biosphere Reserve, Madhya Pradesh, India". *Int. J. Pharmaceut. Sci. Res.* 3(12): 4780–4790. Abstract: This paper describes the utilization



of pteridophytes for the treatment of various gynecological and other related problems by the indigenous women of Pachmarhi Biosphere Reserve in Madhya Pradesh. The present study reveals that 23 species of pteridophytes belonging to 15 families and 18 genera are traditionally used by tribal women of Korku, Gond, Bharia, Bhil, Mauria, Maria, Paria, Bhatara and Baigas communities in gynecological problems which contribute about 18.66% of total pteridophytic diversity (134 species) of the area.

1637. **Singh, Shweta, Dixit, R.D. & Sahu, T.R. 2004.** "Ethnomedicinal and indigenous knowledge of *Dryopteris cochleata* (Buch.-Ham. ex D. Don) C. Chr. and *Tectaria coadunata* (Wall. ex Hook. et Grev.) C. Chr. among the tribal communities of Amarkantak, Madhya Pradesh". *J. Bot. Soc. Univ. Sagar* 39: 113–117. Abstract: Amarkantak in Anuppur district is one of the floristically rich area of the Madhya Pradesh. The various tribal communities of this region are completely depending on forest product for their survival and live in the forest harmony with nature. They are using their knowledge and ancient system of medicine for the treatment of various diseases and in earning money for their lively hood by selling these medicinal plants into the local market. During the collection cum survey tour authors have observed that two species of pteridophytes i.e. *Dryopteris cochleata* (Buch. Ham. ex D. Don) C. Chr. and *Tectaria coadunata* (Wall. ex Hook. et Grev.) C. Chr. belonging to the families Dryopteridaceae and Aspidiaceae, respectively are widely used and sold by the local people in the different parts of the Amarkantak region for the treatment of epilepsy, leprosy, stomach pain, gastro-intestinal disorders and eradication of worm in children. These pteridophytes grow naturally in rock crevices and boulders near water stream in shady and moist places. The present study focus on documentation of ethnomedicinal and indigenous knowledge along with botanical name, specific characters, family, vernacular name used plant parts and ecology of these two species recorded from the area.
1638. **Singh, Shweta, Dixit, R.D. & Sahu, T.R. 2005.** "Ethnomedicinal uses of pteridophytes of Amarkantak, Madhya Pradesh". *Indian J. Tradit. Knowl.* 4(4): 392–395. Abstract: The present communication deals with the ethnomedicinal usage of pteridophytes in the treatment of various diseases. These pteridophytes are widely used by the local tribes and the plant material is sold in the local market of Amarkantak. They grow naturally in rock crevices and boulders near water stream in shady and moist places. The present study documents ethnomedicinal usage of eight pteridophytic plants, which are prevalent in study area along with botanical name, family, vernacular name, distribution in central India, plant parts used and mode of use.
1639. **Singh, S.K. & Beg, M.J. 2015.** "Ethnomedicinal plants of Asteraceae from Chitrakoot area of Satna district (M.P.)". *Indian J. Appl. Pure Biol.* 30(1): 55–60. Abstract: In this study 31 species of Asteraceae were found effective in curing some common human ailments in Chitrakoot area of Satna district (M.P.). Mode of application of these has

been provided in most the cases.

1640. **Singh, V.P. & Jadhav, Dinesh. 2011.** *Ethnobotany of Bhil Tribe. A case study among the Bhils of Ratlam district (Madhya Pradesh)*. Scientific Publishers, Jodhpur. Abstract: A total 210 plants species of ethnobotanical importance belonging to 178 genera and 71 families have been including in this book used by the indigenous people inhabiting all the villages of the district. Further the dicots are represented by 180 species belonging to 150 genera and 59 families and remaining 30 species belongs to 28 genera and 12 families of monocots.
1641. **Singhal, A., Khare, R.K. & Yadav, R. 2017.** "Comparative study of some ethnomedicinal plants among the tribals of Datia and Sheopurkalan district (M.P.)". *Int. J. Life Sci. Scientif. Res.* 3(1): 838–843. Abstract: The term Ethnobotany was first used by Harshberger (1895) and its scope was much elaborated later. Ethnobotany, as an organized discipline of study in India, is rather young, just about five decades old. A number of ethnobotanists of the world have conducted comparative ethno botanical studies on different ethnic groups and different geographical regions. The comparative ethnobotany is helpful in understanding the plant use patterns and factors that affect the use of plants among different populations inhabiting different environments. During the last two decades a number of comparative ethno botanical studies have been conducted in many regions of the world. The present research work was carried out in 19 villages of 4 blocks of Datia district and 41 villages of 5 blocks of Sheopurkalan district. The research work was carried out from January 2012 to October 2015. A total of 35 plant species were reported from both the study regions. As a result of comparative study of medicinal plants it was observed that 23 plant species are used for the treatment of dissimilar diseases in Datia and Sheopurkalan districts, while 12 plant species are used for similar diseases in Datia and Sheopurkalan districts.
1642. **Sinha, B.K. & Dixit, R.D. 2001.** "Ethnobotanical studies on *Sarcostemma acidum* (Asclepiadaceae) from Khargaon district, Madhya Pradesh". *Ethnobotany* 13: 116–117. Abstract: *Sarcostemma acidum* is widely used by the local people in Khargaon district (M.P.) for curing diabetes and rheumatic pain. It occurs naturally in crevices of rocks and large boulders along the banks of river Narmada. The present paper provides ethnomedicinal information recorded for the first time.
1643. **Sinha, B.K. & Dixit, R.D. 2003.** "Ethnomedicinal plants sold in Omkareshwar, Madhya Pradesh". *Ethnobotany* 15: 127–128. Abstract: The paper deals with ethnomedicinal uses of three plant species; *Drosera burmanni* and *Ventilago denticulata* for painful urination and spermatorrhoea (Dhaturog) and *Leea compactiflora* for asthma. They are widely used by the local people of Khandawa and Khargaon with confidence in Madhya Pradesh and the plant material is sold in the market on way to Omkareshwar temple.

The plants occur abundantly along the banks of river Narmada. The present communication provides first-hand information on ethnomedicinal uses.

1644. **Sinha, B.K., Shukla, B.K. & Sharma, P. 2006.** "Ethnomedicinal plants of Chhattisgarh with sporadic distribution". *J. Econ. Taxon. Bot.* 30(Suppl.): 70–109. Abstract: The paper deals with the 450 species of probable medicinal potential, belonging to 310 genera and 84 families from Chhattisgarh. These taxa are used for curing various ailments among the different ethnic societies. Out of 450 species, 223 are herbs, 91 shrubs, 41 climbers and 95 are tree species. The information has been gathered by field survey and from available literature.
1645. **Sinha, M.K., Kanungo, V.K. & Naik, M.L. 2016.** "Ethnobotany in relation to livelihood security in district Bastar of Chhattisgarh state with special reference to non-timber forest produces". *Curr. Bot.* 7: 27–33. Abstract: In the present study, ethnobotany in relation to livelihood security in district Bastar of Chhattisgarh state with special reference to non-timber forest produces (NTFPs) were found to collect a variety of plant produces from forests, for their livelihood security. Those collected plant produces were NTFPs. In this research, total 44 plants producing NTFP were noted to be collected by tribals in 20 villages of Bastar district. Plant and plant produce collected by the tribals from the plants were seeds of 11 plants, fruits of 11, roots of 3, rhizomes of 4, flowers of 4, and secretory products from 3 plants, whereas 4 whole plants. Lakh and Cocoons were also collected by the tribals from the forest. Besides collection of NTFPs, 69 potential marketplaces in Bastar district where marketing of NTFPs was found maximum were also identified for the selling of plant produces.
1646. **Sinha, M.K., Patel, D.K. & Kanungo, V.K. 2013.** "Medicinal plants used in the treatment of skin diseases in central Bastar of Chhattisgarh, India". *Global Adv. Res. J. Med. Pl.* 2(1): 1–3. Abstract: A survey on ethno medicinal plants used in the treatment of skin diseases in central Bastar of Chhattisgarh State has been conducted during 2011-2012. The information on the utilization of the medicinal plants for above purpose were collected on the basis of personal interviews with traditional healers, Baidyas, Sirhas, tribal doctors, old women of the village society in 10 villages of District Bastar. The investigation revealed that 25 medicinal plants belong to 18 families and 21 genera are used in the treatment of skin disease in district Bastar of Chhattisgarh State.
1647. **Sisodiya, M.K. 2013.** "Ethno medicinal plants for jaundice used in tribal areas of Sonkatch-Dewas region (Madhya Pradesh) India". *Asian J. Biochem. Pharmaceut. Res.* 2(3): 188–193. Abstract: Madhya Pradesh region has multicultural, multilingual and multiethnic races. Dewas is a district of Madhya Pradesh state in center India. In this district tribal's are spread over in six tensile namely sonkatch, dewas, Bgagli, Kannod, Tonk- khurd and Khategaon. These tribal's are pre inhabited Ethnic group live in the

remote rural areas of Sonkatch, Pardhikheda, Agera, Khuntkheda, Chaubara jagir. They provide a good source for Ethno medicinal information. They are dependent to the forest resources for their day-to-day activities. The present work is focused on the use of different Ethno medicinal plant on the jaundice diseases. An attempt has been made to use 14 species being 12 families used to recorded by the difference Ethic communities of Sonkatch - Dewas Region (M.P). India.

1648. **Sisodiya, M.K., Ameta, R. & Pancholi, A. 2016.** "Traditional therapeutic ethnobotanical plants used by ancient community of Jhabua district (M. P.) India for Gastro Therapy: An ambit". *Asian J. Biochem. Pharmaceut. Res.* 6(4): 128–136. Abstract: India is Extremely rich in T-traditional, T-therapeutic, E-ethnobotanical plants, which are being utilized at large Extent by the Indian tribal population; in addition, many of the life saving drugs of the present medicinal system are obtained from plant sources only Owing to immensity, it is often difficult to make a complete study of the TTE plants found in a particular community. The present paper enumerates the TTE plants of the Jhabua division of Malva region of Madhya Pradesh, India with Special reference to Ancient community. Madhya Pradesh region has multicultural, multilingual and multiethnic races. The present work is focused on the use of different TTE plant in the Gastro Therapy. An attempt has been made to use 25 species being 17 families used to record by the difference Ancient Community of Jhabua District (M. P.) India.
1649. **Solanki, C.M. & Satya, V. 2004.** "Some ethnomedicinal plants of Dhar district". *Bull. Bot. Surv. India* 46(1-4): 383–389. Abstract: Dhar district is inhabited by dominating tribes, bhils and bhilalas. Bhils constitute the third largest tribe of India. There are many sub-tribes of Bhils viz. Tarvi, Nayar, Nhal, Barela and Kotwal. At the same time sub-tribes of bhilalas, Darbari Bhilala, Dhaplya Bhilala, Rathya Bhilala, also live here. They utilize a large number of plant species occurring in wild as herbal remedies on various diseases and ailments in the area. The paper lists 32 such species.
1650. **Soni, P. 2012.** *Ethnobotanical study of Mawasi tribe in Chitrakoot region*. Ph. D. Thesis, Mahatma Gandhi Chitrakoot Gramodaya Vishavidyalaya, Chitrakoot (M.P.) (unpublished).
1651. **Soni, Priti&Sikarwar, R.L.S.** 2011. "Pharmacopoeial standardization of *Alectra chitrakutensis* (M.A.Rau) R. Prasad & R.D. Dixit found in Chitrakoot region". *J. Nat. Remedies* 11 (2): 124–131.
1652. **Soni, Priti, Sikarwar, R.L.S. & Chaurasia, Sadhana. 2008.** Plants used as Medicine by Mawasi tribe of Chitrakoot region (M.P.). In: Upadhyay, Ashutosh (Ed.) *State of Art in Cultivation, Collection, Storage, Processing & Marketing of Herbal, Medicinal, and Aromatic Plants*. MGCGV, Chitrakoot. Pp. 97–100.
1653. **Soni, Priti, Sikarwar, R.L.S. & Chaurasia, Sadhana 2010.** Plants used in Magico-religious

- Belief by Mawasi tribe of Chitrakoot region. In: Trivedi, P.C. (Ed.) *Ethnic tribes and Medicinal Plants*. Pointer Publishers, Jaipur. Pp. 151–154.
1654. **Soni, Vipin, Modak, Madhuri & Nema, Manisha. 2012.** “Medicinal plants used by the local communities of Singhori Wildlife Sanctuary, Madhya Pradesh, India”. *Int. J. Pharmaceut. Res. & Develop.* 4(9): 93–97. Abstract: Singhori Wildlife Sanctuary is appreciably inhabited by tribal population. Even today, the large segments of the tribal population are dependent upon plant resources for treatment of various diseases and ailments. The paper deals with 21 plant species being used traditionally by Bhel, Daroi and Goud tribal communities for treatments of various diseases in this sanctuary. Data are based on extensive survey, observations, and discussions with the tribal and rural peoples of this region.
1655. **Soni, V., Prakash, A. & Nema, M. 2012.** “Study on ethno-medico-botany of some plants of Dindori district of Madhya Pradesh, India”. *Int. J. Pharm. Life Sci.* 3(8): 1926–1929. Abstract: The ethnic peoples of Dindori have good association with plant resources, which they use for the treatment of various ailments. The traditional knowledge for the utilization of these ethnomedicinal plants is widely accepted by these people. Present paper reveals information about 34 ethnomedicinal plants used by ethnic people of Dindori district of Madhya Pradesh. The results are based on ethnobotanical survey carried out during the year 2009 to 2010.
1656. **Srivastava, Anupam, Patel, Shambhu P., Mishra, Rajesh K., Vashistha, Rajiv K., Singh, Ajay & Pushkar, Ashok K. 2012.** “Ethnomedicinal importance of plants of Amarkantak region, Madhya Pradesh”. *Int. J. Med. Aromat.Pl.* 2: 53–59. Abstract: The present study was carried out in the Amarkantak, region of Madhya Pradesh, India, to document the ethnomedicinal uses of plants. A total of 135 species belonging to 115 genera and 63 families have been reported. Plant species commonly used by local people for food, fodder, medicine and in other fields of their lives are enumerated. A list of plant species along with their local names, plant parts used and mode of application has been given. Ethnomedicinally most important families are Zingiberaceae and fabaceae with 8 species followed by Rubiaceae, Vitaceae and Liliaceae with 7 species. These plant species are utilized by local peoples against various ailments such as cuts and wounds, fever, joint pain, constipation, diarrhoea, eye disease, skin ailments, cough and cold, antidote for poisonous insects, stomach disorders, urinary troubles, liver complaints, digestive problems, jaundice, asthma, bronchitis, etc. Indigenous knowledge or rural and cultural groups has great significance in formulating applicable strategy for the development of any region. This scattered, secretive, fast eroding highly valuable knowledge needs proper documentation. The present study signifies ethnomedicinal values of the plant species occur in Amarkantak region.

1657. **Srivastava, J.L., Jain, S. & Dubey, A. 1999.** Ethno-medicine for anti-fertility used by the tribals in Bastar district of Madhya Pradesh". *J. Econ. Taxon. Bot.* 23(2): 297–300. Abstract: A survey of tribal villages of Bastar district was conducted in order to identify medicinally important plants used by tribals in the region. Paper deals 20 preparations of herbal medicines used by the tribals of Bastar district of Madhya Pradesh for antifertility and abortifacient. The mode of preparation of herbal drugs and method of their administration along with doses were discussed in this paper.
1658. **Srivastava, N.K. 2011.** "Medicinal plants used by tribals of Bandhavgarh National Park (M.P.) India". *Indian J. Appl. Pure Biol.* 26(2): 219–222. Abstract: The present paper deals with 14 medicinal plants used for different diseases in Bandhavgarh National Park M.P. The park has a rich source of medicinal plants and is inhabited by large population of tribal and other backward classes of people viz. Gond, Baiga, Kol etc. who were using various plant parts for health-care and other purposes.
1659. **Srivastava, R. 1984.** "Tribals of Madhya Pradesh and Forest Bill of 1980". *Man in India* 64(3): 320–321.
1660. **Srivastava, R.K. 1985.** Herbal remedies used by the Bhil of Madhya Pradesh. *Oriental med Kyoto, Japan*, pp. 389–392.
1661. **Srivastava, S., Deivedi, S., Dubey, D. & Kapoor, S. 2007.** "Traditional herbal remedies from Madhya Pradesh used as oral contraceptives. A field survey". *Int. J. Green Pharm.* 1(1): 18–22. Abstract: A survey of Madhya Pradesh, India was conducted to record the plants used as oral contraceptives, which are well known in the tribal pockets, are mentioned in the present paper. The rural, tribal and aboriginal peoples of Madhya Pradesh utilize a number of medicinal plants for oral contraceptives. Population is the most inflammable problem due to the existing overwhelming growth rate of the world. Herbal oral contraceptives become need of time because of serious adverse effects produced by synthetic oral contraceptives. This forces us to investigate and identify the plants having antifertility activity. A detailed survey was carried out by the authors to collect information on both reported and unreported medicinal plants of this region. Further research on modern scientific line is necessary to improve their efficacy, safety and validation of the traditional knowledge.
1662. **Srivastava, S., Jain, A.K., Mathur, R. & Srivastava, H.S. 2010.** "Herbal formulations used by rural people in Gwalior district (Madhya Pradesh) for the treatment of common disease of buffalo (*Bos buballicus*)". *Ethnobotany* 22: 145–148. Abstract: Present study deals with commonly observed ailments and diseases of buffalo (*Bos buballicus*) of Gwalior district. Thirty five disorders were identified, of which 27 have been categorised as most commonly occurring diseases of buffalo in and around Gwalior district. These ailments are treated and managed with local herbal recipes and formulations by veterinary practitioners, milkmen and farmers.

1663. **Tarafdar, C.R. & Jain, S.K. 1968.** "Native plant remedies for snakebite among adivasis of central India". *Indian Med. J.* 57(12): 307–309.
1664. **Thakur, A. & Eqbal, S. 2015.** "Uses of some ethnomedicinal plants of tribal communities of Alirajpur district (M.P.)". *Paripex- Indian J. Res.* 4(7): 152–154. Abstract: Alirajpur district is a rich wealth of medicinal plants. The investigation deals with 25 ethnomedicinal plants utilized by tribal communities for the treatment of various diseases.
1665. **Thakur, A., Naqvi, S.M.A., Aske, D.K. & Sainkhediya, J. 2014.** "Study of some ethno medicinal plants used by tribals of Alirajpur, Madhya Pradesh, India". *Res. J. Agric. & Forest. Sci.* 2(4): 9–12. Abstract: Alirajpur is one of the tribal district of Madhya Pradesh and plants are being used as medicine and pharmaceuticals by large numbers of tribal, rural and urban people. Several tribal communities like Bhil, Bhilala and Barela inhabit in the area. An Ethno botanical surveys had been carried out in the Alirajpur district of Madhya Pradesh from 2009-2010. The investigation deals about 15 plant species which is used by tribals of this area. A record of 15 medicinal plant species which is belong to 12 family and 14 genera used by tribals to cure various ailments among human beings are given. Ethno medicinal information was gathering through interview to Barwah and Rajaliya for curing of diseases. The present paper deals with the ethno botanical study of Alirajpur region for the preparation of an inventory. Details of medicinal plants are described alphabetically, Botanical names followed by family, local names, plants part used, and the ethno medicinal uses have been provided.
1666. **Thakur, Y. & Bajpai, S.P. 2011.** "Ethnobotanical studies with reference to wild plants used by the tribals of Sagar District (M.P.)". *J. Trop. Forest.* 27(4): 58–63. Abstract: The present study has been carried out in Bundelkhand region of Sagar district. Wild edible plants constitute an important source of dietary habit of tribes of this region. Even today, well protected forest in this region provides a variety of nutritious foods as edible tubers, roots, rhizomes, leaves, shoots, flowers, fruits, nuts, seeds, etc. Information on 40 wild plant species have been collected from the tribal of the study area and it was observed that these plants are used as food by the tribals not only at the time of food scarcity but also on a daily basis.
1667. **Tirkey, Amia 2002.** *Ethnomedicinal investigation on plants of Dist. Raigarh (M.P.)*. Ph.D. thesis submitted to Barkatullah University, Bhopal (Unpublished).
1668. **Tirkey, A. 2004.** "Some ethnomedicinal plant species of Chhattisgarh state". *Ethnobotany* 16: 118–124. Abstract: During the course of ethnobotanical explorations in Chhattisgarh, a large number of plant species have been collected which are used by the tribals and the villagers for treatment of various ailments. The survey was carried out with the cooperation of tribal vaidyas and villagers. The present paper deals with 50 plant species which are used by them ethnomedicinally. For instance, they use *Nyctanthes arbour-tristis* in sciatica pain and as a safe purgative. *Ochna pumila* for urinary troubles, *Plumbago*

*zeylanica* for body aches, *Porana paniculata* for abortion and healing of wounds and *Premna herbacea* for tuberculosis and abdominal pain. Other medicinal important plants with their mode of administration are dealt with in this communication.

1669. **Tirkey, Amia 2005.** Bibliography of Ethnobotany of Chhattisgarh State, India. Project report submitted to IOE, Gwalior (M.P.).
1670. **Tirkey, Amia. 2006.** "Some ethnomedicinal plants of family– Fabaceae of Chhattisgarh state". *Indian J. Tradit. Knowl.* 5(4): 551–553. Abstract: During ethnobotanical exploration of Chhattisgarh, a number of plants have been collected which are used by the local tribals for the treatment of various ailments. The paper deals with certain plants of the family Fabaceae, which are ethnomedicinally exploited by local tribals of Chhattisgarh, viz., *Abrus precatorius* for skin disease and poor eye-sight, *Clitoria ternatea* as diuretic, *Crotalaria medicaginea* in case of white discharge, *Desmodium gangeticum* for goitre, *Flemingia macrophylla* for arthritis and fever, *Ougeinia dalbergioides* for dysentery, *Pueraria tuberosa* for chest pain and weakness, *Sesbania sesban* for abortion and as antifertility agent. A number of ethnomedicinally important plants with their vernacular names and mode of administration are presented.
1671. **Tirkey, Amia. 2006.** "Fish stupefying plants used by tribals of Jashpur district, Chhattisgarh, India". *J. Econ. Taxon. Bot.* 30(Suppl.): 163–166. Abstract: Jashpur district of Chhattisgarh is mainly inhabited by different tribal communities. The life style of tribal people depends upon the land. Agriculture, hunting, fishing, collection of forest products, bamboo work or labour of any kind is their profession for livelihood. Fishing is an alternative occupation of the tribals and other folk of the area. They use their indigenous knowledge about plants for catching fish easily. The present paper deals with 30 species used by the tribals of Jashpur district for stupefying fish. These species are being reported for the first time from this region. The use of nine of these species as fish poison has not been reported so far in literature.
1672. **Tirkey, Amia & Jain, S.K. 2006.** "Tradition of clan names and conservation among the Oraons of Chhattisgarh". *Indian J. Tradit. Knowl.* 5(2): 224–226. Abstract: The Oraons of Chhattisgarh have a tradition of totemism; name their clans after plants, animals, and other objects of their daily needs or environment. They attach some special significance like faith, taboos or other practices to emphasize the importance of these things in their survival and the need for their conservation. The folk of those clans do not harm these species, and protect them from any damage. Examples of names of some animals, plants, and other objects common among the Oraons of Chhattisgarh are given. Such traditions helping in conservation of biodiversity, and natural resources have been discussed.
1673. **Tirkey, Amia, Khan, F. & Khan S.S. (Ed.) 2000.** Medicinal plants used in the treatment



- of hair in Raigarh district of Madhya Pradesh (India). In: Khan, *et al.* (Eds.), *Vistas in Ethnobotany*. Vol. 1, pp. 104–110.
1674. **Tirkey, Amia, Khan, F. & Khan S.S. (Ed.) 2000.** Medicinal plants used by tribals of Raigarh district (M.P.) for jaundice. In: Khan, *et al.* (Eds.), *Vistas in Ethnobotany*. Vol. 1, pp. 163–171.
1675. **Tirkey, Amia, Khan, S.S. & Khan, F. 2002.** "Plants of Asteraceae: An ethnomedicinal study of Raigarh dist., (Chhattisgarh)". *Indian J. Appl. Pure Biol.* 17(2): 166–169.
1676. **Tirkey, Amia, Khan, S.S. & Khan, F. 2004.** Ethnomedicinally important plants used in the treatment of skin afflictions by the tribals of Chhattisgarh. In: Khan, A.I. & Khanum, A. (Eds.), *Ethnomedicine and Human Welfare*. Ukaaz Publications, Hyderabad. Vol. III, Pp. 68–90.
1677. **Tirkey, Amia, Kumar, Vivek, Sikarwar, R.L.S. & Jain, S.K. 2006.** "Ethnobotanical research in Chhattisgarh – A conspectus". *Ethnobotany* 18:67–76. Abstract: Chhattisgarh, a newly formed state carved out of Madhya Pradesh, is rich in floristic as well as ethnic diversity. It comprises 16 districts and forest cover 44.2% of the area of the state. More than 40 tribal communities reside in or around forests and depend mainly on forest resources for their daily requirements like food, fodder, fibre, medicine, dye, gum, tannin, etc. Since Chhattisgarh is now separated from Madhya Pradesh, a detailed study is required for ascertaining the ethnobotanical status of the state. The present communication is an overview of ethnobotanical work carried out in this state so far.
1678. **Tiwari, A.P. & Ansari, A.A. 2014.** "Ethnomedicinal uses of plants among the tribals of Jashpur district, Chhattisgarh". *J. Non Timber Forest Prod.* 21(2): 137–144. Abstract: The present report on the ethnomedicinal uses of plants among the tribals of Jashpur, Chhattisgarh deals with the 37 species belonging to 36 genera and 32 families, some of which were not reported earlier including new uses from the area and differences in the use of parts of the plants. These plants are traditionally utilised by the tribal people for the cure of ailments such as diarrhoea, rheumatism, spermatorrhoea, dysentery, fever, jaundice, leucorrhoea, ulcers, arthritis, skin diseases, as tonic, as aphrodisiac, etc. In enumeration, the species have been arranged alphabetically with their family, local name in inverted comma followed by uses, localities, collector name and number. Details about parts of the plant used, exact dosage, mode of administration, duration and the name of ailments, etc. are provided.
1679. **Tiwari, A.P., Joshi, B. & Ansari, A.A. 2012.** "Less known ethnomedicinal uses of some orchids by the tribal inhabitants of Amarkantak plateau, Madhya Pradesh, India". *Nature & Sci.* 10(12): 33–37. Abstract: The present paper deals with the less known ethnomedicinal uses of 15 species of orchids belonging to 11 genera, consisting of 6 epiphytes and 9 terrestrials, which are used by the tribal inhabitants of Amarkantak

Plateau, Madhya Pradesh, India. The study reveals that tubers are most frequently used (7 species), followed by roots (6 species) and leaves (3 species) for the treatment of 14 different kinds of ailments/diseases. This paper also discusses about threats to the orchids of this region, as well as some very serious problems relating to their conservation.

1680. **Tiwari, A.P., Sikarwar, R.L.S. & Dubey, P.C. 2014.** "Documentation of ethnomedicinal knowledge among the tribes of Achanakmar-Amarkantak Biosphere Reserve, central India". *Indian J. Nat. Prod. & Resources* 5 (4): 345–350. Abstract: The paper provided ethnomedicinal uses of 33 plant species belonging to 33 genera and 26 families used by the tribal communities of Achanakmar- Amarkantak Biosphere Reserve (AABR), Central India. These plants are mostly used to cure seminal weakness, jaundice, antidote, kidney stones, skin disease, liver and spleen enlargements, etc. Part of the plant used, dosage, mode of drug preparation and administration in different ailments and diseases are described. Ethnomedicinal survey was conducted in the remote villages of AABR during the period 2007-2010. The plants species have been arranged alphabetically with their family, local name and ethnomedicinal uses.
1681. **Tiwari, A.P., Dubey, P.C., Sikarwar, R.L.S. & Khanna, K.K. 2012.** "Ethnomedicinal plants used by Baiga tribe of Achanakmar-Amarkantak Biosphere Reserve, Central India". *J. Trop. Med. Pl.* 13(2): 167–175. Abstract: The paper enumerates the traditional uses of 48 plant species belonging to 45 genera and 37 families, used by the Baiga tribal communities of Achanakmar-Amarkantak Biosphere Reserve, Central India for the treatment of various diseases. The plants are used to cure various health problems. Stomach disorders (18%) problem is highest in study area. In most of the cases bark (31%) is used for curing ailments, followed by root parts (25%), leaves (22%), tubers (12%), whole plants (10%), seeds (6%), fruits (4%), Flowers and other parts (2%). The treatment mode is usually oral. Some ingredients such as honey, common salt and milk are also used.
1682. **Tiwari, D.K. & Yadav, A. 2003.** "Ethnobotanical investigation of some medicinal plants availed by Gond tribe of Naoradehi Wildlife Sanctuary, Madhya Pradesh, India". *Anthropologist* 5(3): 201–202. Abstract: The Gond tribe of Naoradehi Wildlife Sanctuary, Madhya Pradesh were studied in term of use of medicinal plants. Altogether 10 species of medicinal plants were recorded among them, which are used for fever, chest pain, bone fracture, headache, vomiting, abortion, snake bite, ear pain, eye pain and ulcer, respectively. It is emphasized that all efforts should be made to conserve these medicinal plants in a proper way for the health benefit of this community.
1683. **Tiwari, D.N. 1984.** Primitive tribes of Madhya Pradesh: Strategy for development. New Delhi, Government of India.
1684. **Tiwari, N. & Tiwari, S. 2014.** "Assessment of traditional medicinal plants in Balaghat district (M.P.)". *Golden Res. Thoughts* 4(6): 1–5.

1685. **Tiwari, P. 2008.** *Nutritional aspect of some plant species uses in emergency by certain tribal communities of Madhya Pradesh.* Ph.D. Thesis, Jiwaji University, Gwalior, Madhya Pradesh (unpublished).
1686. **Tiwari, R.K.S., OJha, H.M., Chandravanshi, S.S. Dhuria, S.S., Singh, V. & Singh, L. 2002.** "Distribution pattern of medicinal plants in Bilaspur, Jashpur and Bastar regions of Chhattisgarh". *J. Trop. Forest.* 18(4): 78–86. Abstract: Bilaspur, Jashpur and Bastar regions of Chhattisgarh were surveyed to study the distribution pattern of medicinal plants. Medicinal plant species are found in higher concentration in mixed forest as compared to sal forest, whereas in teak forest, density of medicinal species was extremely low. Species like Jungli Haldi (*Curcuma aromatica*), Jungli Adrak (*Zingiber capitatum*), Tikhur (*Curcuma angustifolia*), Keokand (*Costus speciosus*), Kali musli (*Curculigo orchoides*), Ram datun (*Smilax macrophylla*), Jogilat (*Desmodium ferrugineum*), Safed musli (*Chlorophytum* sp.), Jungli sarson (*Brassica* sp.), Van bhindi (*Abelmoschus manihot*), Patal kumhada (*Puraria tuberosa*), Hansia dafar (*Leea aspera*) are common in both types i.e. sal and mixed type forest. However, above species are in higher concentration in mixed forest. On road side and in open forest, Kasoundi (*Cassia occidentalis*), Chirota (*Cassia tora*), Apamarg (*Achranthus aspera*), Van Tulsi (*Ocimum* sp.), Dauna (*Ocimum* sp.) and Lantana (*Lantana camara*) have been recorded. The species of commercial importance like Kali haldi (*Curcuma caesia*), Kalihari (*Gloriosa superba*), Aswagandha (*Withania somnifera*), Sarp Gandha (*Rauwolfia serpentina*) and Gudmar (*Gymnema sylvestre*) have not been recorded in the survey sites of mixed and sal dominated forest area of Bastar, Jagdalpur and Bilaspur forest. Chitrak (*Plumbago zeylanica*), Kewanch (*Mucuna pruriens*), Kalmegh (*Andrographis paniculata*), Jangli Sun (*Crotolaria albida*), Tejraj (*Peucebanum* sp.), Bhojraj, Vansuran (*Arisaeria portuosum*), Nisodh (*Operculina turpethum*), and Nagbel (*Cryptolepis buchmanii*) were recorded only at one or two sites and that too in lower concentration.
1687. **Tiwari, S. & Chandrol, G.K. 2013.** "Ethnomedicinal importance of some plants of Udanti Sanctuary of Chhattisgarh, India". *Advances Pl. Sci.* 26(1): 201–203. Abstract: The paper deals with 25 plant species having medicinal values. Attempts have been made to collect information by approaching different agencies, Udanti Wildlife Sanctuary, located in Raipur district of Chhattisgarh, large number of plants has been used in different disease by local inhabitants. Botanical names, local name, families and uses in different diseases are given parenthetically.
1688. **Tiwari, S.C. & Bharat, A. 2008.** "Natural dye-yielding plants and indigenous knowledge of dye preparation in Achanakmar-Amarkantak Biosphere Reserve, Central India". *Nat. Prod. Radianc* 7(1): 82–87. Abstract: The Chhattisgarh state, in the heart of India, is very rich in biodiversity as well as in the forest cover. Forests of Chhattisgarh have a number of dye yielding plants which produce different colours. The tribal folks of this

region locally use different colours obtained from plants for different purposes such as ornamentation, cosmetics, decorating houses and colouring home utensils made up of mud. The present study was undertaken to assess the diversity of dye-yielding plants of Chhattisgarh, the indigenous method of dye extraction and ethnic uses of dyes. This will be a step towards the biodiversity and ethnic conservation and will also be helpful in understanding the social and cultural life of tribes of this region.

1689. **Toppo, K.I., Chelikswami, L.K. & Gupta, S. 2011.** "Ethnomedicinal importance of some trees of Barnawapara Sanctuary of Chhattisgarh, India". *Advances Pl. Sci.* 24(II): 685–686. Abstract: The flora of Barnawapara Wildlife Sanctuary of Chhattisgarh state consists of tropical deciduous forests and several other varieties of trees like Mahua, Tendu, Ber, etc. The tribals and local communities dwelling in and around the sanctuary have long used the trees for valuable medicinal substances. An attempt has been made to compile the ethnomedicinal utilization of 18 species of trees belonging to 16 genera of 13 families. Some documented tree species are *Terminalia chebula*, *T. bellerica*, *T. arjuna*, *Ficus hispida*, *Gardenia gummifera* and *Adina cordifolia* etc. In general, fruits, barks, leaves and other parts of the trees are used as medicine for traditional health care. In the recent past, traditional healers are dwelling in big numbers and thereby posing a threat to traditional medicinal practices. To address this issue, it is necessary that proper investigation of medicinal properties of various plants of Barnawapara wildlife sanctuary be conducted scientifically.
1690. **Tripathi, Manoj & Sikarwar, R.L.S. 2013.** "Some traditional herbal formulations of Chitrakoot region, Madhya Pradesh, India". *Indian J. Tradit. Knowl.* 12(2): 315–320. Abstract: An ethnobotanical survey was carried out during 2005 -2009 in 20 villages of the Chitrakoot region to collect the information on traditional herbal formulations from the traditional practitioners. The first hand information regarding the traditional herbal formulations such as name of plants, used parts, ingredients, mode of preparation and application, dose and duration etc. was recorded from old and experienced traditional practitioners with the help of prescribed proforma. There are 47 plant species, 45 genera and 31 families used in different ailments and diseases like malarial fever, jaundice, skin diseases, dysentery, pneumonia, bone fracture, cough and cold and urinary disorders etc. described in the present communication.
1691. **Tripathi, R., Dwivedi, S.N. & Dwivedi, S. 2010.** "Ethno-medicinal plants used to treat gynaecological disorders by tribal people of Madhya Pradesh, India". *Int. J. Pharm. Life Sci.* 1(3): 160–169. Abstract: Medicinal plant resources of forest origin are extensively used in India for various systems of medicine like Ayurveda, Unani, Homoeopathy, Allopathy, Siddha and Ethnic etc. Such traditional used of plants as medicine has not been documented properly, rather remain secret and passed from one generation to another through word mouth. Naturally, due to non-recording properly,

this traditional knowledge is gradually vanishing as a result of modernization. The present paper enumerates the use of several medicinal plants from in the treatment of gynecological disorders by the tribal of Madhya Pradesh.

1692. **Upadhyay, N.& Shukla, B. 2017.** "Study of some ethno medicinal plants used by tribals of Shahdol, Madhya Pradesh, India". *Int. J. Bot. Stud.* 2(2): 32–34. Abstract: Shahdol is one of the tribal district of Madhya Pradesh and plants are being used as medicine and pharmaceuticals by large numbers of tribal, rural and urban people. Several tribal communities like Gond, Baiga and Kol inhabit in the area. An ethnobotanical surveys had been carried out in the Shahdol district of Madhya Pradesh from 2015-2016. The investigation deals about 34 plant species which are used by tribals of this area. A record of 34 medicinal plant species which is belong to 28 Family and 34 Genera used by tribals to cure various ailments among human beings are given. Ethno medicinal information was gathering through interview to Ojha and medicman for curing of diseases. The present paper deals with the ethno botanical study of Shahdol region for the preparation of an inventory. Details of medicinal plants are described alphabetically, botanical names followed by family, local names, plants part used, and the ethno medicinal uses have been provided.
1693. **Upadhyay, N.& Shukla, B. 2017.** "Study on ethno-medico-botany of some plants of Shahdol district of Madhya Pradesh, India". *Int. J. Bot. Stud.* 2(5): 37–39. Abstract: The ethnic peoples of Shahdol have good association with plant resources, which they use for the treatment of various ailments. The traditional knowledge for the utilization of these ethno medicinal plants is widely accepted by these people. Present paper reveals information about 38 ethno medicinal plants used by ethnic people of Shahdol district of Madhya Pradesh. The results are based on ethnobotanical survey carried out during the year 2016 to 2017.
1694. **Upadhyay, R. 2013.** "Ethnomedicinal uses of tree bark by tribals of Hoshangabad, Madhya Pradesh, India". *Int. J. Biotechnol. & Bioeng. Res.* 4(7): 671–676. Abstract: Herbal medicines have traditionally provided effective remedies for a variety of human ailments. Their widespread use continues today. A large part of the world's population still relies on plants and their crude extracts as their only affordable source of medicine. Traditional medicines have yielded many important drugs. The present paper reports the use of some tree barks in ethno-medicinal practices by the tribals of Hoshangabad, Madhya Pradesh. These barks are generally used in the form of dried powder, potions or decoctions. Commonly used barks are of *Acacia catechu* in treatment of menstrual complaints, *Aegle marmelos* in diarrhea, *Azadirachta indica* in scabies, body louse and skin diseases, bark of *Balanites aegyptica* as anathematic, *Boswellia serrata* in cold and cough, *Butea monosperma* and *Terminalia arjuna* in bone fracture, *Ficus religiosa* in asthma and cough, *Holarrhena antidysenterica* in bronchial fever and dysentery, *Pterocarpus*

*marsupium* in toothache and mouth ulcers. Preliminary phytochemical screening showed the barks to be rich in tannins, flavonoids and isoflavonoid content. Small quantity of resins was also found in some barks.

1695. **Upadhyay, R. 2003.** "Ethnobotanical observations on some rare and endangered herbs of Singrauli in Madhya Pradesh". *J. Econ. Taxon. Bot.* 27(4): 989–992. Abstract: Singrauli is a large tehsil in district Sidhi of Madhya Pradesh with 1904 sq. km. Area with 50% of the land under forest cover. There exists a remarkable diversity in its floristic elements, with several medicinally and economically important herbs, which are becoming endangered due to rapid urbanisation and development of mines and power projects. An effort has been made to record the traditional uses of 25 species of herbs used by local people. Ethnobotanical notes with distribution of these herbs in this area along with status of rarity in the region have been recorded in this paper.
1696. **Upadhyay, R., Singh, B.P. & Upadhyay, S.T. 2011.** "Ethno-medicinal observations on a threatened tree fern, *Cyathea spinulosa* Wall. ex Hook. in Satpura hills". *Indian Fern J.* 28: 129–136. Abstract: The study enumerates the *Cyathea spinulosa* Wall. ex Hook. widely used by the local people, tourist and tribes in the treatment of various diseases in Satpura hills of Madhya Pradesh. The ferns had an important role in folklore medicine. These plants have been successfully used in the different systems of medicines like Ayurvedic, Unani, Homeopathic and other systems of medicines. Khare P.B. *et al.* (2005) this is a highly-prized ornamental and economic tree fern and a significance component of tropical forests in southern, central and northern India. Currently, it is under threatened status and listed in the Red Data Book. (Frezer-Jenkins, 2008) Since the successful colonization of a fern in new habitats is dependent on gametophyte generation. The taxon is under threatened status. The cause of this and the probable mode of conservation are also discussed here, along with botanical name, family, habitat, plant part used and mode of uses.
1697. **Ved, D.K., Kinhal, G.A., Ravikumar, K., Karnat, M., Vijaya Shankar, R. & Indresha, J.H. 2003.** *Theat Assessment and management Prioritization for the Medicinal Plants of Chhattisgarh and Madhya Pradesh.* FRLHT, Bangalore.
1698. **Venugopal, K. & Raghunathan, K. 1982.** "Medicobotanical-cum-ethnomedicinal survey of district Jhabua (Madhya Pradesh)". *Centr. Counc. Res. Ayurv. Siddha Newsletter* 4–5.
1699. **Vergheese, E. 1996.** *Applied Ethnobotany— A case study among the Kharias of Central India.* Deep Publications, New Delhi. Pp. 1–307.
1700. **Vergheese, E., Jain, S.K. & Bose, N. 1993.** "A quantitative approach to establish the efficacy of herbal remedies: A case study on the Kherias". *Ethnobotany* 5: 149–154. Abstract: This paper attempts a quantitative evaluation of the efficacy of herbal remedies used by the Kharias of central eastern India. Reliability rating for a maximum of ten plants employed for three common diseases, viz. Gastroenteritis, malaria and joint

diseases, is given. Special questionnaires were designed to interview the medicinemen, and other health workers to work out the reliability rating of various plants. The biostatistical formula used for getting the reliability rating is:  $\text{Log}(N_{ij}) = \mu + \hat{a}_i + \hat{a}_j + \bullet_{ij} + \hat{o}_{ij}$ , where  $\mu$  is the overall effect;  $\hat{a}_i$  the main effect due to plant 'i';  $\hat{a}_j$  the main effect due to disease 'j';  $\hat{o}_{ij}$  the interaction effect and  $\bullet_{ij}$  the random variation in cell (i, j).

1701. **Verma, A. 2014.** "Utilization of new research findings and pre-existing knowledge of plants of Bundelkhand region of Madhya Pradesh for the prevention and cure of diabetes". *Int. J. Global Sci. & Res.* 1(1): 58–65. Abstract: Life style diseases are diseases of civilization. Diabetes mellitus is the outcome of modern life style and affect our health immensely. Management of diabetes is still a major challenge. Thus there is a great demand for research on natural products with anti-diabetic properties. The Bundelkhand region of Madhya Pradesh is inhabited by various tribes and villagers. They have a good knowledge of medicinal use of their local flora. An extensive survey of the forested area of Bundelkhand region was carried out to collect information about the ethno-medicinal plants used by the herbalists of various tribal pockets. The plant species were authenticated by herbaria present in Department of Botany Dr. H.S. Gour University. In spite of the 21 plants used by the rural people of Bundelkhand region, there is a new category of three important plants recently recognized as anti-diabetic plants. These are *Allium sativum*, *Allium cepa* and *Aloe vera*. All these plants are very common plants hence may play a very important role in prevention and cure of the diabetes mellitus and might open a door for the formulation of important anti-diabetic medicine from our easily available cheaper source.
1702. **Verma, K.S. & Baksh, S. 2005.** "Solution of bronchodilatory problems through plants". *J. Bot. Soc. Univ. Sagar* 40:109–112. Abstract: The present work is under progress with the remedial aspects of respiratory problems of human being through some plants study. During survey 20 commonly occurring plants were listed. All these occupy their position under 19 angiospermic families. This is collected information from various tribal communities about their medicinal practices. Vernacular name, botanical name, family, plant parts of medicinal use and methods of administration are given in this paper.
1703. **Verma, K.S. & Baksh, Z. 2012.** "Ethno-medicinal plant resources of Jabalpur district (Madhya Pradesh)". *J. Res. Dev.* 12: 39–48. Abstract: Common plants used by the indigenous people of Jabalpur district for medicinal purposes were catalogued based on collections during field trips and visits to traditional medicine practitioners in these parts, and questionnaires administered to resident knowledgeable respondents. These plants were briefly described and their local names provided where possible while the medicinal uses and parts used were listed. Faced with rapid depletion and the current focus on cheaper alternatives to synthetic drugs, the need to document these plant resources and explore short and long term strategies of conserving them were highlighted.

1704. **Verma, K.S., Awasthi, A. & Nigam, R. 2013.** "Steadily narrowing spectrum of certain angiospermic plants used as traditional herbs in Jabalpur (M.P.)". *Life Sci. Bull.* 10(1): 81–84. Abstract: In present study ethnobotanical usages of 100 endemic plant species belonging to different families were enumerated with their taxonomic details, status, information, ethnic values and uses. The work has been undertaken in Jabalpur city of M.P. to record natural bio-diversity. During the tenure of study it was observed that there is depletion in number of species every year due to drastic environmental changes being faced globally. Human activities are the main cause of loss.
1705. **Verma, K.S., Kurmi, L. & Awasthi, A. 2013.** "Conservation status of the Fabaceae taxa in Eastern Madhya Pradesh". *J. Trop. Forest.* 29(4): 42–48. Abstract: Conservation status and strategies of 40 plants species of Fabaceae family which are used by the traditional healers of Eastern Madhya Pradesh are described in this article. The area sustains very rich traditional medicinal plant wealth and harbours unique plant and animal communities. Due to deforestation, loss of biodiversity and indiscriminate exploitation of wild and natural resources, many valuable plants of Fabaceae such as *Abrus precatorious*, *Butea superba*, *Bauhinia vahlii*, *Erythrina suberosa* and *Mucuna pruriens* etc. are under a serious threat of extinction. The necessity of conserving plants that are being over exploited for their miscellaneous utilities, is now well recognized.
1706. **Verma, K.S., Pandey, R. & Ayachi, A. 2014.** "Nutritional assessment of different parts of *Acacia catechu* Willd. collected from Central India". *Int. J. Pharmaceut. Sci. Res.* 5(7): 2980–2986. Abstract: *Acacia catechu* is a multipurpose tree predominantly found in tropical and subtropical regions of India. The tree produces nitrogen rich fodder and green manure, high quality fuel wood and charcoal, strong durable poles and timber. The most useful products of this tree are Kutch or "Kattha" which is obtained from bark and heartwood of the tree. Commonly used plant part of *Acacia catechu* is bark which is a usual source of Kattha, is strong antioxidant, astringent, anti-inflammatory, antibacterial and antifungal in nature. The tree is also used as fodder for goat and cattle in many parts of India. However, the other plant parts of *Acacia catechu* especially from Central India have not been investigated for their nutritive value. The present study showcases a comprehensive investigation on different plant parts of *Acacia catechu* collected from Jabalpur. The results show that the young legumes of *Acacia catechu* can serve as a better source of nutrition for both human and animals.
1707. **Verma, K.S., Pandey, R. & Ayachi, A. 2014.** "Use of seed bearing pods of *Acacia catechu* Willd. from forests of Jabalpur region as food". *J. Trop. Forest.* 30(2): 33–41. Abstract: *Acacia catechu* is a multipurpose predominant forest tree in and around Jabalpur area. The present study showcases a comprehensive investigation on seed bearing pods of *Acacia catechu* collected from Jabalpur. The presence of major secondary metabolites was established using extracts of pods. The pods were extracted sequentially with solvents



of decreasing polarity. Further, in order to ascertain its suitability as food, proximate analysis along with the heavy metal toxicity was done. The proximate analysis shows high amounts of protein and carbohydrates in seed bearing pods along with high nutritional value. Further, inductively coupled plasma atomic emission spectroscopy (ICP AES) revealed that the seed bearing pods from Jabalpur region are free from toxic heavy metals i.e. As, Pb, Hg and Se. Hence, these pods can be a good source of food.

1708. **Verma, P. & Verma, A. 2010.** "Important laticiferous ethnomedicinal plants of Sagar district of Madhya Pradesh". *Biozone* 2(1-2): 265–269. Abstract:
1709. **Verma, P., Khan, A.A. & Singh, K.K. 1995.** "Traditional phytotherapy among the Baiga tribe of Shahdol district of Madhya Pradesh, India". *Ethnobotany* 7: 69–73. Abstract: The Baiga tribe is an offshoot of Bhainyas of Bengal and Bihar and they consider Nanga Baiga as their ancestor. They also call themselves Bhumia, and the Bhumia and Bharotiya inhabit Baigachak of Mandla district and Garhi-dadar of Shahdol district of Madhya Pradesh. They depend heavily on the surrounding flora for the treatment of diseases and disorders. First hand information on local names, ethnomedicinal recipes, dosage and mode of administration have been gathered from the medicinemen called ojhas, Bharras, Guniyas, Vaidyarajs, Patharis, Maharajs, etc. and some other experienced informants. The present study deals with 17 ethnomedicinal plants used by the Baiga tribe in their health care. There is urgent need for phytochemical and pharmacological screening of these plants to determine their true therapeutic value.
1710. **Verma, Rajani. 1982.** "Medico-floristic approach on the forests of Kolaras, distt. Shivpuri (Madhya Pradesh): III– Annual herbs". *J. Econ. Taxon. Bot.* 3: 689–694. Abstract: The Ayurvedic system of medicine is felt to be appropriate to India where 80% of the population reside in villages. Synthetic medicines are often unavailable in villages and are sold at sky high prices to unsuspecting villagers. Herbal medicines are both economical and readily available, and their scientific use can cure the root cause of a disease, not just the symptom. Keeping in view for providing raw material for herbal medicines, the present study has been carried out to identify the plant species and information collected about the medicinal uses of the plants of forests of Kolaras range. The studied area is still unexplored. About 188 species have been identified. Trees, shrubs and perennial herbs have already been studied and produced for publication. Only annual herbs are taken into consideration for present attempt.
1711. **Verma, R.K. 2014.** "An ethnobotanical study of plants used for the treatment of livestock diseases in Tikamgarh district of Bundelkhand, Central India". *Asian Pac. J. Trop. Biomed.* 4(Suppl. 1): S460–S467. Abstract: To explore and document the information regarding usage of ethnoveterinary medicinal plants utilized by rural farmers and traditional herbal healers for livestock healthcare in Tikamgarh District of Bundelkhand, Central India. A total of 41 plant species in 39 genera and 25 families were used traditionally

with various plant parts and their combinations for the treatment of more than 36 diseases in the studied area. Trees (17 species) were found to be the most used Ethnoveterinary medicinal plants followed by herbs (15 species), shrubs (6 species) and grasses (3) in descending order. The most common diseases cough, diarrhoea and fever were treated by 4 ethnoveterinary medicinal plant species.

1712. **Wagh, V.V. 2014.** Some important medicinal plants used by tribes of Jhabua district (M.P.). In: Kumar, S. (Ed.), *Foundations in Ethnobotany*. Deep Publications, New Delhi.
1713. **Wagh, V.V. & Jain, A.K. 2010.** "Ethnomedicinal observations among the Bheel and Bhilala tribe of Jhabua District, Madhya Pradesh, India". *Ethnobot. Leaflet*. 14: 715–720. Abstract: The paper highlights uses of 15 ethnomedicinal plants traditionally utilized by the Bheel and Bhilala tribes of Jhabua district. The plant species are used as herbal medicines for treatment of various ailments and healthcare.
1714. **Wagh, V.V. & Jain, A.K. 2010.** "Ethnomedicine for curing jaundice in Jhabua District of Madhya Pradesh, India". *Ethnobotany* 28: 53–59. Abstract: Present study aims to analyse and record ethnomedicinal practices for treating jaundice in Jhabua district of Madhya Pradesh. Data was collected using participant observations and in-depth interviews. A total of 45 ethnomedicinal plants species belonging to 33 families were documented used for the treatment of jaundice. Mainly leaves and roots were preferred part to prepare a decoction, paste, infusion, etc. Most of the plant species are sources of different chemical constituents which further contributes in formulating drug for common use. There is a need for further critical phytochemical analysis and investigation of new valid drugs. Immediate documentation of such valuable knowledge is necessary.
1715. **Wagh V.V. & Jain, A.K. 2014.** "Ethnomedicinal uses of underground plant parts in Jhabua district of Madhya Pradesh, India". *Advances Biol. Res.* 8(4): 151–156. Abstract: The study was conducted in and around of Jhabua district from June 2008 to May 2012. Several field trips were carried out in the study area to document the utilization of underground medicinal plant parts. Underground plant parts are well known in Jhabua district as Kandmool which are eaten at time of scarcity and used for curing various ailments by the tribal people. In the interior areas of Jhabua district, plants become the only source of medicine because lack of modern facilities and remoteness. In this paper, 64 traditional medicinal plants have been reported, belonging to 34 families. Mostly used families are Liliaceae (5 spp.) followed by Malvaceae, Fabaceae and Asclepiadaceae (4 spp.) each and Amaranthaceae (3 spp.), Araceae, Dioscoreaceae, Cucurbitaceae and Poaceae (3 spp.) each. The traditional medicinal plants have been mostly used for the treatment of fever, rheumatism, respiratory disorders, stomach disorders, cough and cold, antidote against snake bite and scorpion bite. The present study revealed that the tribal people of Jhabua district are primarily dependent on underground plant parts for treating various diseases.

1716. **Wagh V.V. & Jain, A.K. 2014.** "Herbal remedies used by the tribal people of Jhabua district, Madhya Pradesh for the treatment of Joint diseases". *Int. J. Phytotherapy* 4(2): 63–66. Abstract: The present study deals with survey on ethno - medicinal plants of Jhabua district in Madhya Pradesh. A good number of plant species are being used by tribal and rural people for the treatment of joint diseases e.g. rheumatism, gout and arthritis. In this study, 35 ethno medicinal plant species belonging to 32 families and 35 genera were recorded. Out of 35 plant species, 16 are used for curing arthritis 11 for rheumatism and 8 for gout. *Vitex negundo* is a popular herb frequently used by the local tribal people for many joint diseases.
1717. **Wagh, V.V., Jain, A.K. & Kadel, C. 2010.** "Role of non-timber forest products in the livelihood of tribal community of Jhabua district (M.P.)". *Biol. Forum* 2(1): 45–48. Abstract: Jhabua is a predominantly tribal district; living close to forest tribals of this district are totally dependent on the forest for their daily needs. The role of NTFPs becomes more significant for less agriculture dependent communities with small land holders residing in remote forests. Collecting and selling of NTFPs is considered as an important way of using vegetation in sustainable manner. Edible and medicinal plants are principle NTFPs. Types, species and amount of NTFPs are different in different seasons and also influenced by the location. Thirty nine (39) economically important species utilized by the local people have been recorded from the Jhabua district. The importance of NTFPs collection and trading in local communities has shown decreasing trend due to the exotic culture invading in the study region.
1718. **Wagh, V.V., Jain, A.K. & Kadel, C. 2011.** "Ethnomedicinal plants used for curing dysentery and diarrhoea by tribals of Jhabua district (Madhya Pradesh)". *Indian J. Nat. Prod. & Resources* 2(2): 256–260. Abstract: Jhabua district of Madhya Pradesh is inhabited by Bhil and Bhilala tribes who possess vast knowledge about uses of a good number of plant species for curing various ailments. The present papers deals with 20 plant species used against dysentery and diarrhoea by these tribes. All plants are enumerated along with botanical name followed by family, local names, voucher specimen number, parts uses and mode of administration of drugs. Out of 20 plant species 09 plants species are used against diarrhoea and 11 against dysentery.
1719. **Yadav, Ashok. 2006.** "Native ethnomedicinal plants used by tribal people of Sagar, Madhya Pradesh". *J. Bot. Soc. Univ. Sagar* 41: 103–110. Abstract: Present study deals with medicinal plants and their uses. There is a large population of tribal people. A good biodiversity can be observed in their region due to favourable atmospheric conditions. Besides modern medicinal facility a large portion of tribal population is still dependent upon medicinal plant and herbal products. This study provides an insight of these remedies and various uses of medicinal plants. The study also provides certain information and primary sources of medicinal plants. It highlights tribal (rural) health

care based on medicinal plants.

1720. **Yadav, A.K. 2002.** *Conservation and seed production studies of selected ethno-medicinal endangered species of Sagar district.* Ph.D. Thesis, Dr. H.S. Gour University, Sagar, Madhya Pradesh (unpublished).
1721. **Yadav, M.& Khan, K.K. 2012.** "Antimicrobial activity of some ethnomedicinal plants used by tribes of Rewa, Madhya Pradesh". *Indian J. Life Sci.* 1(2): 35–38. Abstract: Antimicrobial activity of 11 ethnomedicinal plant extracts were evaluated against nine bacterial strains, *Bacillus subtilis*, *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Enterococcus faecalis*, *Escherichia coli*, *Klebsiella pneumonia*, *Pseudomonas aeruginosa*, *Ervinia sp*, *Proteus vulgaris*, and one fungal strain, *Candida albicans*. The collected ethnomedicinal plants were used in folk medicine in the treatment of skin diseases, venereal diseases, respiratory problems and nervous disorders. Out of 11 plants, 10 plants exhibited antimicrobial activity against one or more of the tested microorganisms at three different concentrations of 1.25, 2.5 and 5 mg/disc. Among the plant tested, *Acalypha fruticosa*, *Peltophorum pterocarpum*, *Toddalia asiatica*, *Cassia auriculata*, *Punica granatum* and *Syzygium lineare* are most active. The highest antifungal activity was exhibited by methanol extract of *Peltophorum pterocarpum* and *Punica granatum* against *Candida albicans*.
1722. **Yadav, M.& Khan, K.K. 2012.** "Study of ethnomedicinal plants used in the treatment of viral hepatitis, Rewa district, Madhya Pradesh". *Indian J. Sci. Res.* 3(1): 149–151. Abstract: The present communication deals with the exploration of ethnomedicinal plants of Rewa District, Madhya Pradesh, with special reference to the treatment of viral hepatitis. Out of the several plants species used by the tribal communities of Rewa region, only fourteen plant species have been presently reported, used for the treatment of viral hepatitis.
1723. **Yadav, M., Khan, K.K. & Beg, M. 2012.** "Ethnobotanical plants used for curing skin diseases by tribals of Rewa district (Madhya Pradesh)". *Indian J. Life Sci.* 2(1): 123–126.
1724. **Yadav, R.& Khare, R.K. 2014.** "Traditional uses of medicinal plants among the tribals of Shivpuri district (M.P.)". *Periodic Res.* III(II): 70–75. Abstract: The tribals of Shivpuri district live in the vicinity of forest and due to being close to the nature, they possess a deep practical knowledge of medicinal value of different plant species growing around them. This paper deals with the medicinal uses of 45 plant species of 30 families. The tribals of Shivpuri district utilise various plant species for treatment of various diseases and ailments like bronchial diseases, intestinal disorder, skin disease, bone fracture, jaundice, menstrual disorder, leucomea, malarial fever, rheumatism, toothache, earache etc.
1725. **Zahoor, A., Shaukat, S.S., Wani, A.A. & Khan, F. 2013.** "Ethnomedicinal plants used for different ailments by the tribals of district Raisen (M.P.), India". *J. Med. Pl. Res.* 7(7): 298–303. Abstract: The present investigation was carried out for documentation of

native medicinal plants which are exploited for medicinal purposes in the Raisen district of Madhya Pradesh. The district is rich in repository economically as well as ethnomedicinally for important for plants. Information was collected from tribals using interview and semi-structural questionnaires among the traditional medicine men of the area. First hand information on ethnomedicinal uses of plants, part used, mode of administration, botanical name, and family is enlisted in the paper which deals with 25 medicinal plants used for different dreaded diseases like diabetes, cancer, sexual disorders, ulcers, etc. These plants are arranged alphabetically in table.

1726. **Zahoor, A.L., Lone, Y., Shaukat, S.K., Wani, A.A. & Mohd, I.R. 2015.** "Hepatoprotective medicinal plants used by the Gond and Bhil tribals of district Raisen, Madhya Pradesh, India". *J. Med. Pl. Res.* 9(12): 400–406. Abstract: The ethnobotanical survey of the medicinal plants used in the management of jaundice (hepatic disorder) was carried out in the District Raisen of Madhya Pradesh. The herbalists, herb sellers and traditionalists were interviewed by the administration of questionnaires. Floristically, the area is placed in Malwa plateau region of Madhya Pradesh. Aims of the study were to document the medicinal plant resources and their use patterns by the tribal people. A total of 19 plant species belonging to 16 families were reported as locally used for the hepatic disorder purposes. Majority of the recipes are prepared in the form of decoction from freshly collected plant parts. Mostly a single species is used and taken orally. Field observations showed that vegetation of the area was generally threatened with the ignorance of local communities. The trends like urbanization, deforestation, over grazing, habitat fragmentation, unscientific extraction of natural vegetation, introduction of the exotic taxa and habitat loss were the visible threats. Measures for the conservation of plant resources especially medicinal plants of Raisen district of Madhya Pradesh are urgently needed. Some of the important species for the alleviation of hepatic disorders are *Aegle marmelos*, *Azadirachta indica*, *Cajanus cajan*, *Cuscuta reflexa*, *Gloriosa superba* and *Ricinus communis*.



## ABBREVIATION OF JOURNALS

The titles of journals have been standardised following **Botanico-Periodicum-Huntianum (Lawrence & al., 1968)**, **B-P-H/Supplementum (Bridson & Smith, 1991)** and **BPH2: Periodicals with Botanical Content (Bridson, 2004)**. The journals which are not in BPH and its Supplements have been abbreviated as suggested in the journals, or as per the rules of B-P-H.

Academic J. Pl. Sci.	:	Academic Journal of Plant Science
Advances Appl. Sci. Res.	:	Advances in Applied Science Research
Advances Biol. Res.	:	Advances in Biological Research
Advances Life Sci. & Technol.	:	Advances Life Science & Technology
Advances Pl. Sci.	:	Advances in Plant Sciences
Advances Pl. Sci. Res.	:	Advances in Plant Sciences Research
Advances Pl. Sci. Res. India	:	Advances in Plant Sciences Research India
African J. Pharma. & Pharmacol.	:	African Journal of Pharmacy & Pharmacology
Ancient Sci. Life	:	Ancient Science Life
Ann. Pharm. & Pharmaceut. Sci.	:	Annals of Pharmacy and Pharmaceutical Sciences
Acta Biol.	:	Acta Biologica
Acta Bot. Indica	:	Acta Botanica Indica
Acta Ecol.	:	Acta Ecologica
Adibasi	:	Adibasi
Agric. Biol. Res.	:	Agricultural Biological Research
Agric. Sci. Digest	:	Agricultural Science Digest
Agriculturists	:	Agriculturists
Amer. J. Environmental Protection	:	American Journal of Environmental Protection
Amer. J. Ethnomed.	:	American Journal of Ethnomedicine
Amer. J. Life Sci. Res.	:	American Journal of Life Science Research
Amer. J. Pl. Sci.	:	American Journal of Plant Science
Ancient Sci. Life	:	Ancient Sci. Life
Ann. Forest.	:	Annals of Forest
Ann. Pl. Sci.	:	Annals of Plant Science
Anthropologist	:	Anthropologist
Appl. Bot. Abstr.	:	Applied Botanical Abstract
Appl. Ecol. & Environm. Sci.	:	Applied Ecological & Environmental Science
Archives of Pharmacy & Biol. Sci.	:	Archives of Pharmacy & Biological Science
Arhat Vacan	:	Arhat Vacan
Arunachal Forest News	:	Arunachal Forest News
Aryavaidyan	:	Aryavaidyan
Asian J. Biochem. Pharmaceut. Res.	:	Asian Journal of Biochemical & Pharmaceutical Research

Asian J. Microbiol., Biotech. & Environm. Sci.	:	<i>Asian Journal of Microbiology, Biotechnology &amp; Environmental Science</i>
Asian Pac. J. Trop. Biomed.	:	Asian Pacific Journal of Tropical Biomedicine
Asian J. Res. Pharma. Sci.	:	Asian Journal of Research in Pharmaceutical Science
Aspects Pl. Sci.	:	Aspects of Plant Science
Biblioth. Phycol.	:	Bibliotheca Phycologica
Bioinfolet- Quart. J. Sci.	:	Bioinfolet- Quarterly Journal of Science
Biolife	:	Biolife
Biol. Forum	:	Biological Forum
Biol. Mem.	:	Biological Memories
Biome	:	Biome
Biomed.	:	Biomedicine
Biomed. Pharmacol. J.	:	Biomedicine & Pharmacological Journal
Bionature	:	Bionature
Biosci. Disc.	:	Bioscience Discovery
Biozone	:	Biozone
Botanique	:	The Botanique
Bull. Bot. Soc. Univ. Saugar	:	Bulletin of Botanical Society of University of Saugar
Bull. Bot. Surv. India	:	Bulletin of the Botanical Survey of India (Vol. 1–50, 1959–2009. Superseded by: Nelumbo)
Bull. Dept. Anthropol.	:	Bulletin of Department of Anthropology
Bull. Environm. Pharmacol. & Life Sci.	:	Bulletin of Environment Pharmacological & Life Science
Bull. Int. Soc. Trop. Ecol.	:	Bulletin of International Society of Tropical Ecology
Bull. Med.-Ethno-Bot. Res.	:	Bulletin of Medico-Ethno-Botanical Research
Bull. Reg. Res. Lab. Jammu	:	Bulletin of Regional Research Laboratory Jammu
Bull. TDRI	:	Bulletin of TDRI
Bull. TRJ, Bhopal	:	Bulletin of TRJ, Bhopal
Bull. Tribal Res. Inst. Bhopal	:	Bulletin of Tribal Research Institute Bhopal
Calcutta J. Nat. Hist.	:	Calcutta Journal of Natural History
Centr. Coun. Res. Ayurv. Siddha Newsletter	:	Centre for Council of Research Ayurveda & Siddha Newsletter
Chikitsa	:	Chikitsa
CIBTech J. Pharmaceut. Sci.	:	CIBTech Journal of Pharmaceutical Science
Curr. Bot.	:	Current Botany
Curr. Res. Med. & Arom. Pl.	:	Current Research in Medicinal & Aromatic Plant
Ecol. Environm. & Conserv.	:	Ecology Environment & Conservation
Econ. Bot.	:	Economic Botany
Environm. Conserv.	:	Environmental Conservation



Ethnobotany	:	Ethnobotany
Ethnobot. Leafl.	:	Ethnobotanical Leaflet
Ethno-Med.	:	Ethno-Medicine
Ethnomusicology	:	Ethnomusicology
European J. Pharm. Med. Res.	:	European Journal of Pharmacy in Medical Research
Fitoterapia	:	Fitoterapia
Fl. & Fauna	:	Flora & Fauna
Folklore	:	Folklore
Forest Bull.	:	Forest Bulletin
Forestry Bull. ENVIS	:	Forestry Bulletin ENVIS
Geobios (Jodhpur)	:	Geobios; an international (bimonthly) journal of life sciences. Jodhpur
Geobios, New Rep.	:	Geobios, New Reports
Geophytology	:	Geophytology
Global Adv. Res. J. Med. Pl.	:	Global Advances Reserch Journal of Medicinal Plant
Golden Res. Thoughts	:	Golden Research Thoughts
Heritage Amruth	:	Heritage Amruth
Imperial J. Interdisciplinary Res.	:	Imperial Journal of Interdisciplinary Research
IMA Fungus	:	IMA Fungus
Indian Bot. Repert.	:	Indian Botanical Repertorium
Indian Fern J.	:	Indian Fern Journal
Indian Forest Rec., Bot.	:	Indian Forest Records. New Series, Botany
Indian Forester	:	The Indian Forester
Indian J. Appl. Pure Biol.	:	Indian Journal of Applied and Pure Biology
Indian J. Bot. Sci.	:	Indian Journal of Botanical Science
Indian J. Forest.	:	Indian Journal of Forestry
Indian J. Forest., Addit. Ser.	:	Indian Journal of Forestry, Additional Series
Indian J. Life Sci.	:	Indian Journal of Life Science
Indian J. Malariology	:	Indian Journal of Malariology
Indian Med.	:	Indian Medicine
Indian Med. J.	:	Indian Medicinal Journal
Indian J. Nat. Prod. & Resources	:	Indian Journal of Natural Products & Resources
Indian J. Orthopaed.	:	Indian J. Orthopaedics
Indian J. Pl. Sci.	:	Indian Journal of Plant Sciences
Indian J. Sci. Res.	:	Indian Journal of Science & Research
Indian J. Tradit. Knowl.	:	Indian Journal of Traditional Knowledge
Indian J. Trop. Biodiv.	:	Indian Journal of Tropical Biodiversity
Indian J. Trop. Forest.	:	Indian Journal of Tropical Forestry
Indian J. Weed Sci.	:	Indian Journal of Weed Science

Indian Med. J.	:	Indian Medicinal Journal
Indian Mus. Bull.	:	Indian Mus. Bulletin
Indian Sci. Congr.	:	Indian Science Congress
Indo American J. Pharmceut. Res.	:	Indo American Journal of Pharmceutical Research
Int. J. Advance Res. Sci. & Engineer.	:	Intetnational Journal of Advance Research in Science & Engineering
Int. J. Advanced Comput. Theory & Engineer.	:	Intetnational Journal of Advanced Computer Theory & Engineering
Int. J. Advanced Res.	:	Intetnational Journal of Advanced Research
Int. J. Advances Res. Biol. Sci.	:	Intetnational Journal of Advances Research in Biological Science
Int. J. Advances Life. Sci.	:	Intetnational Journal of Advances Research in Life Science
Int. J. Agric.	:	Intetnational Journal of Agriculture
Int. J. Appl. Life Sci.	:	Intetnational Journal of Applied Life Science
Int. J. Appl. Res.	:	Intetnational Journal of Applied Research
Int. J. Behavioural Social and Movement Sci.	:	Intetnational Journal of Behavioural Social and Movement Science
Int. J. Biodiv. Cons.	:	International Journal of Biodiversity and Conservation
Int. J. Biol. Res.	:	International Journal of Biological Research
Int. J. Biotechnol. & Bioeng. Res.	:	International Journal of Biotechnology & Bioengineering Research
Int. J. Bot. Stud.	:	International Journal of Botanical Studies
Int. J. Curr. Microbiol. Appl. Sci.	:	International Journal of Current Microbiology and Applied Sciences
Int. J. Curr. Res. Biosci. Pl. Biol.	:	International Journal of Current Research in Bioscience in Plant Biology
Int. J. Curr. Res. Life Sci.	:	International Journal of Current Research in Life Science
Int. J. Curr. Sci.	:	International Journal of Current Science
Int. J. Drug Discovery & Herbal Res.	:	International Journal of Drug Discovery & Herbal Research
Int. J. Engineering Sci. Invention	:	International Journal of Engineering Science Invention
Int. J. Ethnobiol. Ethnomed.	:	International Journal of Ethnobiology & Ethnomedicine
Int. J. For Environm. Rehabilitation and Conserv.	:	International Journal For Environmental Rehabilitation and Conservation
Int. J. Global Sci. & Res.	:	International Journal of Global Science & Research
Int. J. Green Pharm.	:	International Journal of Green Pharmacy
Int. J. Herbal Med.	:	International Journal of Herbal Medicine

- Int. J. Innovat. Res. Developm. : International Journal of Innovative Research and Development
- Int. J. Life Sci. : International Journal of Life Science
- Int. J. Life Sci. & Med. Res. : International Journal of Life Science & Medical Research
- Int. J. Life Sci. & Med. Sci. : International Journal of Life Science & Medical Science
- Int. J. Life Sci. Scientif. Res. : International Journal of Life Science & Scientific Research
- Int. J. Med. Aromat. Pl. : International Journal of Medicinal and Aromatic Plant
- Int. J. Pharma. & Integrated Life Sci. : International Journal of Pharmacy and Integrated Life Science
- Int. J. Pharmaceut. Sci. & Res. : International Journal of Pharmaceutical Science and Research
- Int. J. Pharm. & Pharmaceut. Res. : International Journal of Pharmacy and Pharmaceutical Research
- Int. J. Pharm. Life Sci. : International Journal of Pharmacy and Life Science
- Int. J. Pharm. Sci. Res. : International Journal of Pharmaceutical Science and Research
- Int. J. Pharma Res. Health Sci. : International Journal of Pharma Research and Health Science
- Int. J. Pharm. Teachi. Practices : International Journal of Pharma in Teaching Practices
- Int. J. Pharmacogn. : International Journal of pharmacognosy
- Int. J. Pharmacogn. & Phytochem. Res. : International Journal of Pharmacognosy & Phytochemical Research
- Int. J. Pharmaceut. Res. & Develop. : International Journal of Pharmaceutical Research & Development
- Int. J. Pharmacol. Biol. Sci. : International Journal of Pharmacological and Biological Science
- Int. J. Phytotherapy : International Journal of Phytotherapy
- Int. J. Pl. Sci. : International Journal of Plant Science
- Int. J. Pl. Animal Environm. Sci. : International Journal of Plant, Animal & Environmental Science
- Int. J. Recent Scientific Res. : International Journal of Recent Scientific Research
- Int. J. Res. – Granthaalayah : International Journal of Research – Granthaalayah
- Int. J. Res. Appl. Sci. & Engineering Technol. : International Journal of Research on Applied Science & Engineering Technology
- Int. J. Res. Ayurveda Pharma. : International Journal of Research in Ayurveda Pharmacy
- Int. J. Res. Develop. Pharm. & Life Sci. : International Journal of Research Development in Pharmacy & Life Science

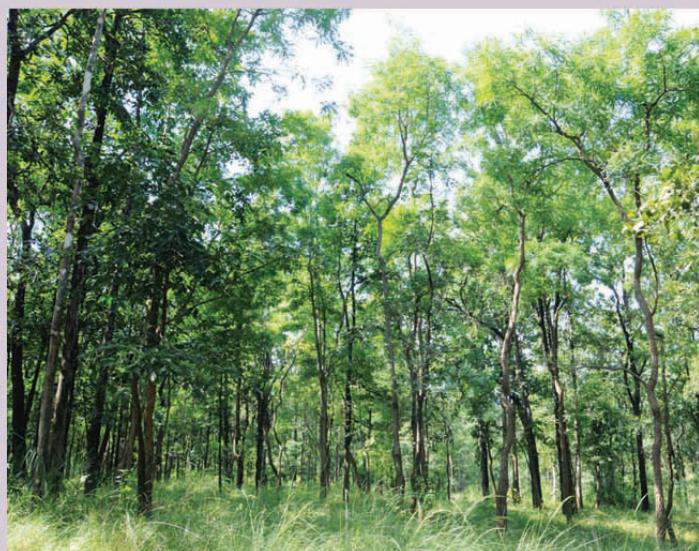
Int. J. Sci. & Res.	:	International Journal of Science and Research
Int. J. Sci. & Tech.	:	International Journal of Science and Technology
Int. J. Trop. Agric.	:	International Journal of Tropical Agriculture
Int. Res. J. Biol. Sci.	:	International Research Journal in Biological Science
Int. Sci. J.	:	International Science Journal
IOSR J. Pharm. & Biol. Sci.	:	IOSR Journal of Pharmacy & Biological Science
ISCA J. Biol. Sci.	:	ISCA Journal of Biological Science
J. Acad. Indus. Res.	:	Journal of Academic Industrial Research
J. Amer. Sci.	:	Journal of American Science
J. Appl. Nat. Sci.	:	Journal of Applied Natural Science
J. Appl. Pure Biol.	:	Journal of Applied and Pure Biology
J. Appl. Zool. Res.	:	Journal of Applied Zoological Research
J. Biodiversity	:	Journal of Biodiversity
J. Biomed. Pharmaceut. Res.	:	Journal of Biomedicine and Pharmaceutical Research
J. Bombay Nat. Hist. Soc.	:	Journal of the Bombay Natural History Society
J. Bot. Res.	:	Journal of the Botanical Research
J. Bot. Soc. Univ. Sagar	:	Journal of Botanical Society of University of Sagar
J. Drug Res. Ayurved. Sci.	:	Journal of Drug Research in Ayurvedic Science
J. Ecol.	:	Journal of Ecology
J. Econ. Taxon. Bot.	:	Journal of Economic and Taxonomic Botany
J. Econ. Taxon. Bot., Addit. Ser.	:	Journal of Economic and Taxonomic Botany Additional Series
J. Environmental Protection	:	Journal of Environmental Protection
J. Ethnobiol. & Ethnomed.	:	Journal of Ethnobiology & Ethnomedicine
J. Ethnobiol. Tradit. Med.	:	Journal of Ethnobiology Traditional Medicine
J. Ethnopharmacol.	:	Journal of Ethnopharmacology
J. Global Biosci.	:	Journal Global Bioscience
J. Human Ecol.	:	Journal of Human Ecology
J. Indian Bot. Soc.	:	The Journal of the Indian Botanical Society
J. Med. Arom. Pl. Sci.	:	Journal of Medicinal and Aromatic Plant Science
J. Med. Pl. Res.	:	Journal of Medicinal Plant Research
J. Med. Pl. Stud.	:	Journal of Medicinal Plant Studies
J. Nat. Remedies	:	Journal of Natatural Remedies
J. Non-Timber Forest Prod.	:	Journal of Non-Timber Forest Products
J. Nutr. Food Sci.	:	Journal of Nutritional Food Science
J. Pl. Sci. Res.	:	Journal of Plant Science Research
J. & Proc. Asiat. Soc. Bengal	:	Journal and Proceedings of the Asiatic Society of Bengal

J. Res. Dev.	: Journal of Research and Development
J. Res. Indian Med.	: Journal of Research in Indian Medicine
J. Roy. Asiat. Soc. Bengal	: Journal of the Royal Asiatic Society of Bengal
J. Sci.	: Journal of Science
J. Sci. Res.	: Journal of Science Research
J. Scient. Res.	: Journal of Scientific Research
J. Tradit. & Folk Practices	: Journal of Traditional & Folk Practices
J. Trop. Forest.	: Journal of Tropical Forestry
J. Trop. Med. Pl.	: Journal of Tropical Medicinal Plant
<b>J. Vik. Univ.</b>	: <b>Journal of Vik. University</b>
J. Swamy Bot. Club	: Journal of Swamy Botanical Club
KAAV Int. J. Sci. Engineering & Technol.	: KAAV International Journal of Science Engineering & Technology
Khadi Gramodyog	: Khadi Gramodyog
Keanean J. Sci.	: Keanean Journal of Science
Kew Bull.	: Kew Bulletin
Lab. J. Sci. & Technol. India India	: Laboratory Journal of Science and Technology
Lichenologist	: Lichenologist
Life Sci. Bull.	: Life Science Bulletin
Life Sci. Leaflets	: Life Science Leaflets
Macro Level Environm. Planning Strategies & Policies	: Macro Level Environm. Planning Strategies & Policies
Man in India	: Man in India
Med. Pl.-Int. J. Phytomed. & Related Industries	: Medicinal Plant– International Journal of Phytomedicine and Related Industries
Mem. Indian Bot. Soc	: Memories of Indian Botanical Society
MFP News	: MFP News
Mycoses	: Mycoses
Mykosen	: Mykosen
Natl. J. Life Sci.	: National Journal of Life Science
Nature and Biosphere	: Nature and Biosphere
Nature & Sci.	: Nature and Science
Nat. Prod. Radiance	: Natural Product Radiance
NBRI Newsletter	: NBRI Newsletter
Nelumbo	: Nelumbo (Vol. 51+, 2010+. Preceded by: Bulletin of the Botanical Survey of India)
New Agriculturist	: New Agriculturist
Newsletter CCRAS	: Newsletter CCRAS
Paripex- Indian J. Res.	: Paripex- Indian Journal of Reserch
Periodic Res.	: Periodic Res.
Pharm. & Pharmacol. Int. J.	: Pharmacy & Pharmacological International Journal
Pharmaceut. Biol.	: Pharmaceutical Biology
Pharmaceut. & Biol. Evaluations	: Pharmaceutical and Biological Evaluations
Phykos	: Phykos
Phytotaxa	: Phytotaxa

Phytotaxonomy	:	Phytotaxonomy
Pl. Archives	:	Plant Archives
Pl. Sci.	:	Plant Science
Proc. Indian Sci. Congr.	:	Proceedings of Indian Science Congress
Proc. Indian Natl. Sci. Acad.	:	Proceedings Indian National Science Academy
Proc. Natl. Acad. Sci. India	:	Proceedings of National Academy of Science, India
Proc. Natl. Inst. Sci. India	:	Proceedings of National Institute of Science India
Proc. Natl. Seminar Med. & Aromatic Pl. Jabalpur	:	Proceedings of National Seminar on Medicinal & Aromatic Plant Jabalpur
Proc. School Pl. Ecol.	:	Proceedings of School of Plant Ecology
Quart. J. Myth. Soc.	:	Quarterly Journal of Mythological Society
Rec. Bot. Surv. India	:	Records of Botanical Survey of India
Res. J. Agric. & Forest. Sci.	:	Research Journal of Agriculture & Forestry Science
Res. J. Environm.	:	Research Journal of Environment
Res. J. Pl. Environm.	:	Research Journal of Plant & Environment
Res. J. Recent Sci.	:	Research Journal of Recent Science
Res. J. Sci. & Technol.	:	Research Journal of Science & Technology
Scholars Impact	:	Scholars Impact
Sci. & Cult.	:	Science & Culture
Sci. Res. Report	:	Science Research Report
Sci. Secure J. Biotechnol.	:	Science Secure Journal of Biotechnology
SEB Newsletter	:	SEB Newsletter
Taxon	:	Taxon
Tribal Health Bull.	:	Tribal Health Bulletin
Trop. Ecol.	:	Tropical Ecology
Trop. Med. Pl., Malaysia	:	Tropical Medicinal Plant, Malaysia
Van Vigyan	:	Van Vigyan
Vaniki Sandesh	:	Vaniki Sandesh
Vanyajati	:	Vanyajati
Vasundhara	:	Vasundhara
Vasundhara, The Earth	:	Vasundhara, The Earth
Weed News	:	Weed News
World J. Pharmaceut. Res.	:	World Journal of Pharmaceutical Research
World J. Pharm. Pharmaceut. Sci.	:	World Journal of Pharmacy and Pharmaceutical Science
World Weeds	:	World Weeds



A forest view of Pachmarhi Biosphere Reserve



A view of mixed forest at Churna range, Pachmarhi Biosphere Reserve



Dhupgarh point-Pachmarhi Biosphere Reserve



*Drosera bumanni*



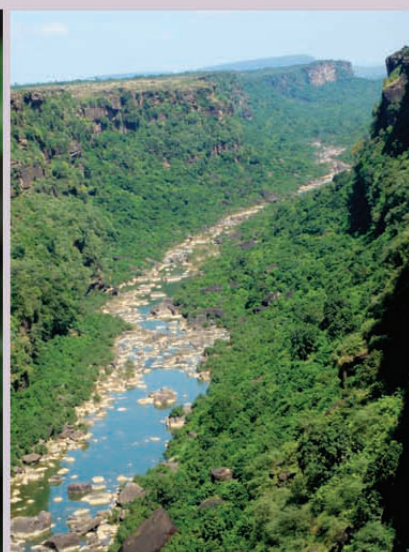
Govindgarh Lake-A Proposed Ramsar Site



*Alectra chitrakutensis*-Endemic



*Rauvolfia serpentina*-Critically Endangered



Vegetation along River, Rewa