



RESEARCH ARTICLE

Checklist of legumes of Haveri district, Karnataka, India

Ningaraj S. Makanur* and K. Kotresha

Abstract

Fabaceae is one of the largest families of angiosperms. During the floristic analysis of the Haveri District, 131 species of Fabaceae members representing 72 genera categorised under four subfamilies were recorded. Papilionoideae is the largest subfamily with 42 genera and 77 species, it contributes 59% of total legume flora. Here authors have enumerated concerning with their botanical name, subfamily, habit, phenology, IUCN status and their utilisation. The habit-wise analysis shows that herbaceous flora is dominant. The genus *Crotalaria* and *Senna* with 8 species each emerged as the dominant genera. The legumes of the district are utilised by the local people for different purposes like, medicinal plants, edibles, pulses, vegetables, oil-yielding, fodder and green manure-yielding. These economically important plant conservation and sustainable utilisation are the responsibility of each citizen.

Keywords: Checklist; endemic species; leguminosae; LPWG classification; IUCN status.

Introduction

The man started to recognize and utilize plants for various needs like food, shelter and medicines (Asfaw and Abebe 2021). Leguminosae is a family of flowering plants which includes a large set of ecologically and economically important food crops that provide highly nutritious sources of plant protein and micronutrients, which can greatly benefit health and livelihoods. Globally, it consists of close to 800 genera and more than 22,000 species and stands as the third-largest family in terms of the number of species of flowering plants (LPWG 2023, Schrire *et al.* 2005)

India is one of the mega-diverse nations with its unique geographical position and complex topography that

supports the rich and diverse flora that comprises 7-8% of total global species (Mao *et al.* 2023). Recent studies on legume diversity shows that 130 species and 3 subspecies from Pantnagar, Uttarakhand (Dhami *et al.* 2023). 74 taxa and 38 genera were documented from the Satmala hills, Maharashtra (Wagh and Patil 2023). 140 leguminous taxa were recorded from the Birbhum District of West Bengal (Alam and Lokho 2024). A checklist of legumes of the Balaghat Ranges of Maharashtra shows 123 species (Gore and Gaikwad 2015).

In Karnataka, the family Fabaceae is comprises of 480 taxa belonging to 131 genera, which includes 127 endemic taxa (Sanjappa and Sringswara, 2019). In adjacent districts of Haveri district, 128 species were recorded from the Gadag District (Kambhar and Kotresha, 2011). 157 taxa were reported from the Bagalkot District (Dalavi *et al.* 2021). In Bankapura Peacock Conservation Reserve of Haveri district was reported with 24 species and 21 genera (Makanur and Kotresha, 2022b). 122 species were enlisted from the Ballari and Vijayanagar Districts (Sagar and Amarappa, 2023). Due to the high importance of legumes to human beings in day-to-day life in various fields as stated above, the present study is an attempt to document the legume database and to shed light on the diversity and distribution of Fabaceae in Haveri district, Karnataka.

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Table 1: Checklist of legumes of Haveri District as per the latest classification LPWG (2017).

<i>Botanical Name</i>	<i>Habit</i>	<i>Vernacular Names</i>	<i>Phenology</i>	<i>IUCN Status</i>
<i>Sub-family- CERCIDOIDEAE</i>				
<i>Bauhinia purpurea</i> L.	T	Kanchuvala	Feb-Dec	LC
<i>Bauhinia racemosa</i> Lam.	T	Kadu mandara	Apr-Jan	NE
<i>Bauhinia variegata</i> L.	T	Kendu mandara	Sep-May	LC
<i>Piliostigma malabaricum</i> (Roxb.) Benth.	T	Basavanapada	Aug-Dec	NE
<i>Sub-family: DETARIOIDEAE</i>				
<i>Hardwickia binata</i> Roxb.	T	Kammara	Aug-Jan	LC
<i>Saraca asoca</i> (Roxb.) W.J.de Wilde	T	Ashoka mara	Mar-Oct	VU
<i>Tamarindus indica</i> L.	T	Hunase mara	Apr-Dec	LC
<i>Sub-family: CAESALPINIOIDEAE</i>				
<i>Acacia auriculiformis</i> A.Cunn. ex Benth.	T	Acaia	Dec-Aug	LC
<i>Adenanthera pavonina</i> L.	T	Dodda gulaganji	Jan-Sep	LC
<i>Albizia amara</i> (Roxb.) Boivin	T	Tugli mara	Sep-Jun	LC
<i>Albizia chinensis</i> (Osbeck) Merr.	T		Mar-Dec	NE
<i>Albizia lebbbeck</i> (L.) Benth.	T	Baage	Mar-Nov	LC
<i>Albizia odoratissima</i> (L.f.) Benth.	T	Kadu bage	May-Feb	LC
<i>Guilandina bonduc</i> L.	C	Gajjuga,	Aug-May	LC
<i>Caesalpinia decapetala</i> (Roth) Alston	S	Kurudu gejjuga	Oct-May	LC
<i>Caesalpinia pulcherrima</i> (L.) Sw.	S	Meese hoovu	TTY	LC
<i>Calliandra haematocephala</i> Hassk.	S		TTY	NE
<i>Cassia fistula</i> L.	T	Kakke mara	Aug-May	LC
<i>Cassia javanica</i> L.	T		Sep-May	LC
<i>Chamaecrista absus</i> (L.) H.S.Irwin & Barneby	H			LC
<i>Chamaecrista mimosoides</i> (L.) Greene	H		Jul-Feb	LC
<i>Delonix regia</i> (Hook.) Raf.	T	Kempu Torai	Apr-Jun	LC
<i>Desmanthus virgatus</i> (L.) Willd	H		TTY	LC
<i>Hultholia mimosoides</i> (Lam.) Gagnon & G.P.Lewis	S	Mullugajje		NE
<i>Leucaena leucocephala</i> (Lam.) de Wit	T	Subabul	TTY	NE
<i>Libidibia coriaria</i> (Jacq.) Schltdl.	T	Seeme alde mara	May-Nov	LC
<i>Mimosa hamata</i> Willd.	S	Tangadi mara	Jun-Dec	NE
<i>Mimosa pudica</i> L.	H	Nachigemullu	TTY	LC
<i>Moullava spicata</i> (Dalzell) Nicolson	S	Gajjiga balli	Oct-Mar	NE
<i>Neptunia oleracea</i> Loureiro	H	Nidrayam	Jan-Nov	LC

<i>Parkia biglandulosa</i> Wight & Arn.	T	Shivalingada mara	Oct-May	NE
<i>Parkinsonia aculeata</i> L.	T	Parangi jali	Jul-Dec	LC
<i>Peltophorum pterocarpum</i> (DC.) K.Heyne	T	Bettada huli	Feb-Dec	NE
<i>Pithecellobium dulce</i> (Roxb.) Benth.	T	Dvara hunase	Dec-Jul	LC
<i>Prosopis cineraria</i> (L.) Druce	T	Banni mara	Apr-May	NE
<i>Prosopis juliflora</i> (Sw.) DC	T	Bellary jali	Oct-May	NE
<i>Samanea saman</i> (Jacq.) Merr.	T	Male mara	Mar-Sep	LC
<i>Senegalia catechu</i> (L.f.) P.J.H.Hurter & Mabb.	T	Kaachhu	Mar-Dec	LC
<i>Senegalia chundra</i> (Roxb. ex Rottler) Maslin	T	Kempu jali, Tare	May-Oct	NE
<i>Senegalia ferruginea</i> (DC.) Pedley	S		TTY	VU
<i>Senegalia pennata</i> (L.) Maslin	T			LC
<i>Senegalia rugata</i> (Lam.) Britton & Rose	T	Shigekayi	Jul-Nov	NE
<i>Senna alata</i> (L.) Roxb.	S	Aane thagathe	Sep-Feb	LC
<i>Senna auriculata</i> (L.) Roxb.	S	Thavarike	TTY	NE
<i>Senna hirsuta</i> (L.) H.S.Irwin & Barneby	H		Jun-Apr	NE
<i>Senna occidentalis</i> (L.) Link	H	Kola thagache	Jul-Feb	LC
<i>Senna siamea</i> (Lam.) H.S.Irwin & Barneby	T	Thangadi	Jul-Dec	LC
<i>Senna sophora</i> (L.) Roxb.	S	Alemuruga	Jul-Jan	NE
<i>Senna surattensis</i> (Burm. f.) H.S. Irwin & Barneby	S	Adavi thangadi	Aug-Jan	LC
<i>Senna tora</i> (L.) Roxb.	H	Chagache	Sep-Dec	NE
<i>Vachellia farnesiana</i> (L.) Wight & Arn.	T	Kasturi Jali	Sep-Feb	LC
<i>Vachellia horrida</i> (L.) Kyal. & Boatwr.	T	Anegobli	Jan-Nov	NE
<i>Vachellia nilotica</i> (L.) P.J.H.Hurter & Mabb.	T	Gobbalimara	Jul-Oct	LC
<i>Xylia xylocarpa</i> (Roxb.) Taub.	T	Jambe	TTY	LC

Sub-family: PAPILIONOIDEAE

<i>Abrus precatorius</i> L.	C	Gulganji	TTY	NE
<i>Aeschynomene americana</i> L.	H		Sep-Dec	NE
<i>Aeschynomene aspera</i> L.	S	Tanakali	Aug-Jan	LC
<i>Aeschynomene indica</i> L.	H	Bendu kasa	TTY	LC
<i>Alysicarpus bupleurifolius</i> (L.) DC.	H		Sep-Jan	LC
<i>Alysicarpus monilifer</i> (L.) DC.	H	Halubu	Sep-Jan	NE
<i>Alysicarpus ovalifolius</i> (Schumach.) J.Léonard	H		Aug-Dec	NE
<i>Alysicarpus scariosus</i> (Spreng.) Thwaites	H		Sep-Nov	NE
<i>Alysicarpus tetragonolobus</i> Edgew.	H		Jul-Dec	NE
<i>Alysicarpus vaginalis</i> (L.) DC.	H	Alubu	Aug-Jan	NE

<i>Arachis hypogaea</i> L.	H	Shenga		NE
<i>Brachypterum scandens</i> (Roxb.) Wight & Arn. ex Miq.	C	Handhi balli	Jul-Feb	NE
<i>Butea monosperma</i> (Lam.) Taubert	T	Mutthugada mara	Jan-Jul	LC
<i>Cajanus cajan</i> (L.) Huth	S	Togari		NE
<i>Cajanus scarabaeoides</i> (L.) Thouars	C	Kaduthogari	Aug-Mar	LC
<i>Canavalia ensiformis</i> (L.) DC.	C	Shembi avare	Aug-Mar	LC
<i>Centrosema pubescens</i> Benth.	C	Adavi shakapushpa	Aug-Nov	NE
<i>Cicer arietinum</i> L.	H	Kadale kaalu		NE
<i>Clitoria terneata</i> L.	C	Shankpushpi	Mar-Oct	NE
<i>Crotalaria hebecarpa</i> (DC.) Rudd	H		Jul-Dec	NE
<i>Crotalaria juncea</i> L.	S		Aug-May	NE
<i>Crotalaria medicaginea</i> Lam.	H		TTY	NE
<i>Crotalaria pallida</i> Aiton	S	Gulangani	TTY	NE
<i>Crotalaria pusilla</i> Heyne ex Roth	H		Jul-Jan	NE
<i>Crotalaria retusa</i> L.	H	Gejje gida	Aug-Mar	NE
<i>Crotalaria verrucosa</i> L.	H		TTY	NE
<i>Crotalaria vestita</i> Baker	H		Nov-Feb	NE
<i>Cullen corylifolium</i> (L.) Medik.	H	Bavanchi	Oct-Mar	LC
<i>Cyamopsis tetragonoloba</i> (L.) Taub.	H	Chavali Kaayi		NE
<i>Dalbergia horrida</i> (Dennst.) Mabb.	S	Maradeeballi	Sep-Feb	NT
<i>Dalbergia lanceolaria</i> L.f.	T	Bili beete	Mar-Dec	LC
<i>Dalbergia latifolia</i> Roxb.	T	Beete mara	Jul-Feb	VU
<i>Dalbergia sissoo</i> Roxb.	T	Biradi	Feb-Oct	LC
<i>Dendrolobium triangulare</i> (Retz.) Schindl	S		Aug-Jan	NE
<i>Erythrina stricta</i> Roxb.	T	Keechige	Jan-May	NE
<i>Erythrina suberosa</i> Roxb.	T	Mandara	Feb-June	NE
<i>Gliricidia sepium</i> (Jacq.) Walp.	T	Gobbrada gida	Feb-May	LC
<i>Glycine max</i> (L.) Merr.	H	Soyabean		NE
<i>Grona triflora</i> (L.) H. Ohashi & K. Ohashi	H	Kadu avare	TTY	NE
<i>Indigofera arrecta</i> Hochst. ex A. Rich.	S		Sep-Dec	NE
<i>Indigofera astragalina</i> DC.	H		Aug-Feb	NE
<i>Indigofera colutea</i> (Burm.f.) Merr.	S	Antu kogge	Sep-Mar	NE
<i>Indigofera cordifolia</i> Heyne ex Roth	H		Jun-Jan	NE
<i>Indigofera linifolia</i> (L.f.) Retz.	H		Sep-Jan	LC
<i>Indigofera linnaei</i> Ali	H	Kannegilu	Jul-Jan	NE

<i>Indigofera tinctoria</i> L.	H	Neeli gida	Aug-Jan	NE
<i>Lablab purpureus</i> (L.) Sweet	C	Avare Kayyi		NE
<i>Macroptilium atropurpureum</i> (DC.) Urb.	H		Aug-Jan	NE
<i>Macroptilium lathyroides</i> (L.) Urb.	H		Oct-Nov	NE
<i>Macrotyloma uniflorum</i> (Lam.) Verdc.	C	Huruli		LC
<i>Mucuna pruriens</i> (L.) DC.	C	Nasagunni kaayi	Sep-Mar	NE
<i>Neonotonia wightii</i> (Wight & Arn.) J.A. Lackey	C	Kaadu Soya Avare	TTY	LC
<i>Paracalyx scariosus</i> (Roxb.) Ali	C	Kadle naaru	Dec-May	NE
<i>Phyllodium pulchellum</i> (L.) Desv.	S		Sep-Feb	LC
<i>Pleurolobus gangeticus</i> (L.) J.St.-Hil. ex H.Ohashi & K.Ohashi	S	Bennachhuga	Oct-Jan	NE
<i>Pongamia pinnata</i> (L.) Pierre	T	Hongemara	Apr-Dec	LC
<i>Pseudarthria viscida</i> (L.) Wight. & Arn.	S	Antuparni	Aug-Feb	NE
<i>Pterocarpus marsupium</i> Roxb.	T	Honne mara	Mar-Nov	NT
<i>Pycnospora lutescens</i> (Poir.) Schindl.	H		Sep-Dec	NE
<i>Rhynchosia cana</i> (Willd.) DC.	H		Dec-Apr	NE
<i>Rhynchosia minima</i> (L.) DC.	C	Ghattavare	Nov-Feb	LC
<i>Rhynchosia rufescens</i> (Willd.) DC.	H		Oct-Feb	NE
<i>Sesbania grandiflora</i> (L.) Poir.	T		Dec-Mar	NE
<i>Sesbania sesban</i> (L.) Merr.	S	Adavi chogache	Aug-Mar	LC
<i>Smithia sensitiva</i> Aiton	H		Aug-Dec	LC
<i>Stylosanthes fruticosa</i> (Retz.) Alston	H		Jun-Feb	NE
<i>Stylosanthes hamata</i> (L.) Taub.	H		Aug-Jan	NE
<i>Tephrosia pumila</i> (Lam.) Pers.	H	Kolingii	Jul-Dec	LC
<i>Tephrosia purpurea</i> (L.) Pers.	H	Sharapunkha	TTY	NE
<i>Tephrosia villosa</i> (L.) Pers.	H		Sep-Apr	LC
<i>Teramnus labialis</i> (L.f.) Spreng.	C	Kadu uddu	Jul-Jan	NE
<i>Trigonella foenum-graecum</i> L.	H	Menthe		NE
<i>Vigna aconitifolia</i> (Jacq.) Maréchal	H	Madaki		DD
<i>Vigna radiata</i> (L.) R.Wilczek	H	Hesaru kaalu	May-Dec	LC
<i>Vigna trilobata</i> (L.) Verdc.	H	Pisaru kaayi	Jun-Feb	NE
<i>Vigna unguiculata</i> (L.) Walp.	H	Alasandi	TTY	NE
<i>Zornia gibbosa</i> Spanoghe	H	Nela jollu soppu	Aug-Jan	NE

Abbreviations: C-Climber; H-Herb; S-Shrub; T-Tree; TTY-Throughout the year; NE-Not Evaluated; LC-Least Concern; VU-Vulnerable; NT-Near Threatened; DD- Data Deficient.

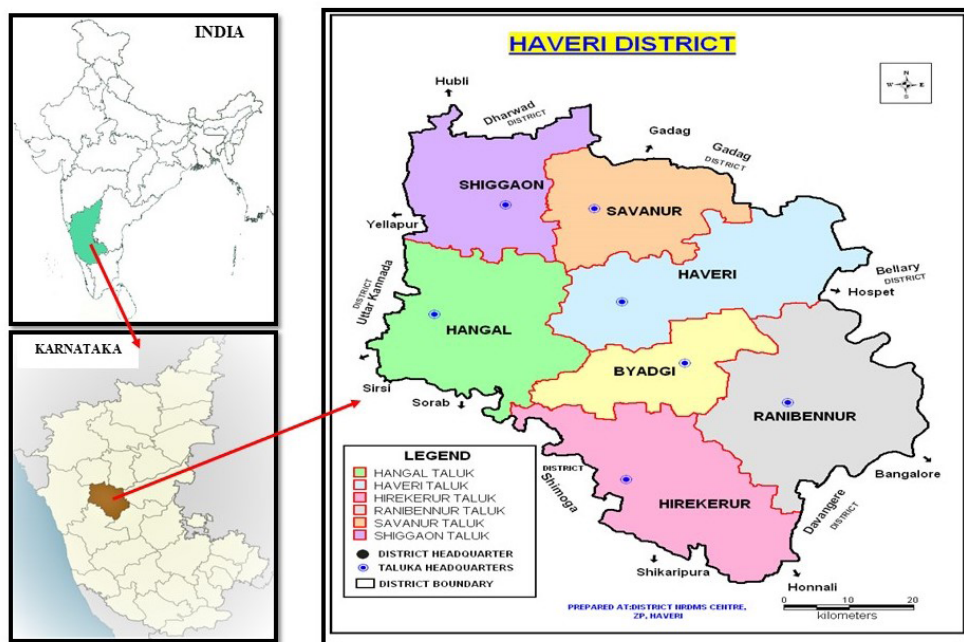


Figure 1: Map of the study area

Materials and methods

Study area

Haveri district is situated in the central part of Karnataka state. It came into existence on 24-08-1997 and covers a total geographical area of 4848 km². The area of the district is 2.52% of the total area of Karnataka state (SOI, 2024). It comprises 8 talukas namely Byadagi, Haveri, Hanagal, Hirekerur, Ranebennur, Rattihalli, Savanur and Shiggaon (Fig.1). The vegetational cover of the area may be divided into 2 types: 1. *Semi-malnad*: It covers the major parts of Shiggaon, Hanagal, Hirekerur and Byadagi talukas lies in the Western region of the district. It comprises a typical landscape having low ranges with monsoonal forest cover. The hill range of Masur and Marvalli spread towards the extreme south and 2. *Maidan*: The maidan region extended over the talukas of Haveri, Ranebennur, Savanur and Eastern part of Byadgi. To the East of the semi-malnad belt lies the undulated plain region called the "Maidan Area". It is featured by isolated hills like Devagiri Gudda, Nelogal Gudda, Siddapur Gudda and Malthihalli Gudda. The isolated hills are 609 Mts. MSL (Seema Garg, 2013).

Data collection

The specimens were collected from the study area in different seasons by extensive and intensive field tours throughout the district covering various habitats from November 2020 to August 2023. All the collected specimens were identified and confirmed with the aid of previously published literature and flora such as Cooke 1958, Sharma 1984, Saldanha 1984,

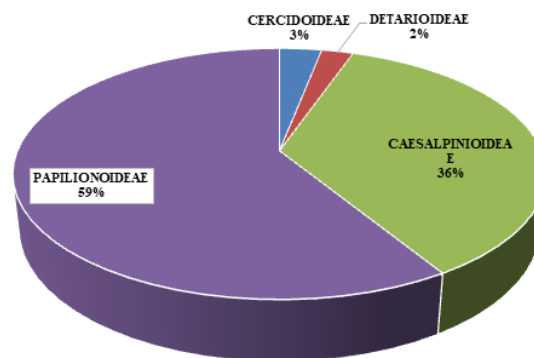


Figure 2: Subfamily wise distribution

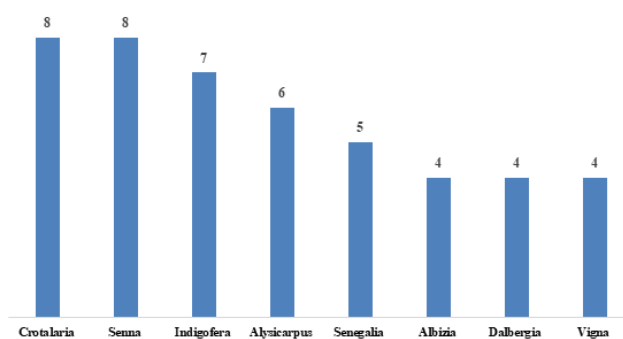


Figure 3: Dominant genera in the study area

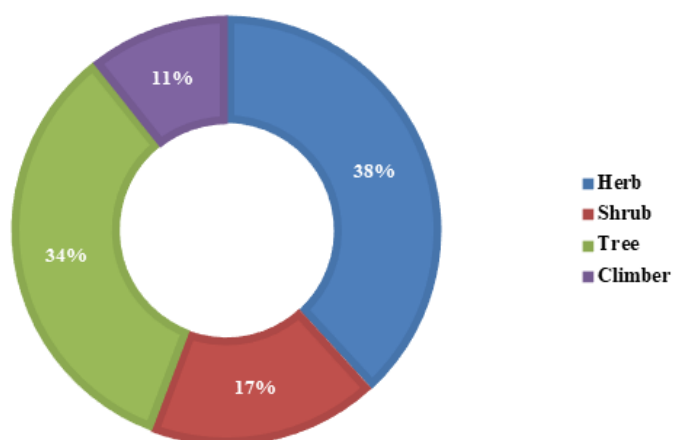


Figure 4: Habit-wise analysis of legume flora

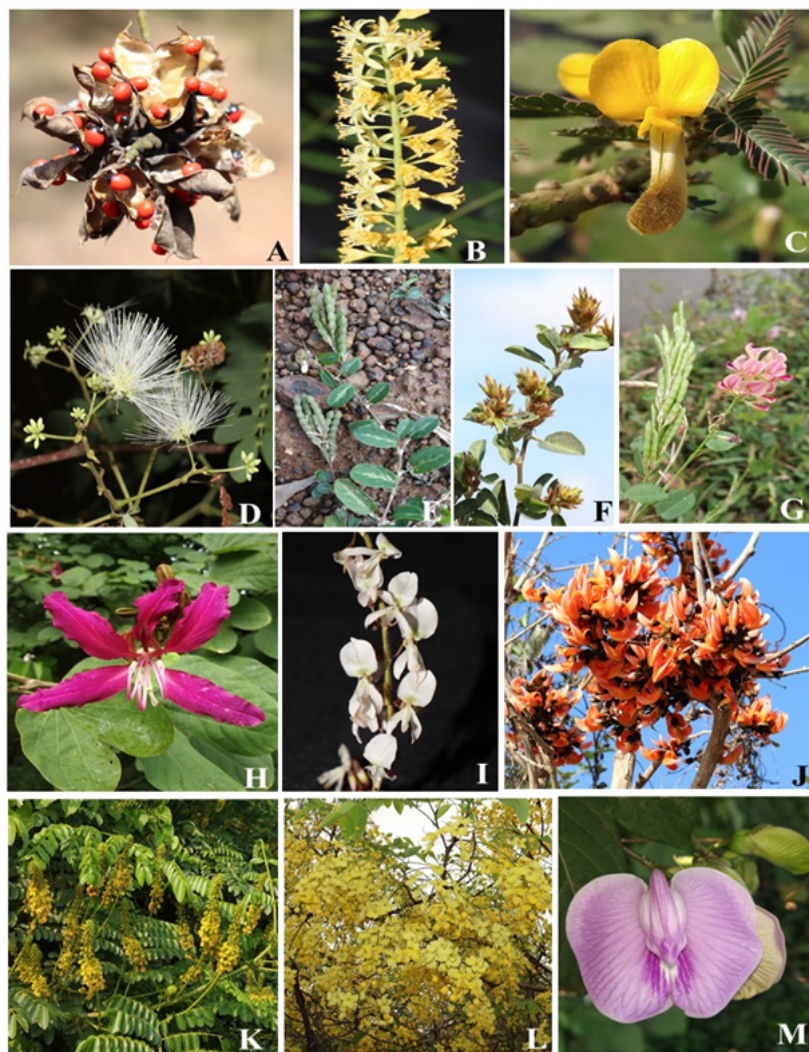


Figure 5: A. *Abrus precatorius* L.; B. *Adenanthera pavonina* L.; C. *Aeschynomene aspera* L.; D. *Albizia odoratissima* (L.f.) Benth.; E. *Alysicarpus monilifer* (L.) DC.; F. *Alysicarpus scariosus* (Spreng.) Thwaites; G. *Alysicarpus vaginalis* (L.) DC.; H. *Bauhinia purpurea* L.; I. *Brachypterum scandens* (Roxb.) Wight & Arn. ex Miq.; J. *Butea monosperma* (Lam.) Taubert; K. *Guilandina bonduc* L.; L. *Cassia fistula* L.; M. *Centrosema pubescens* Benth.

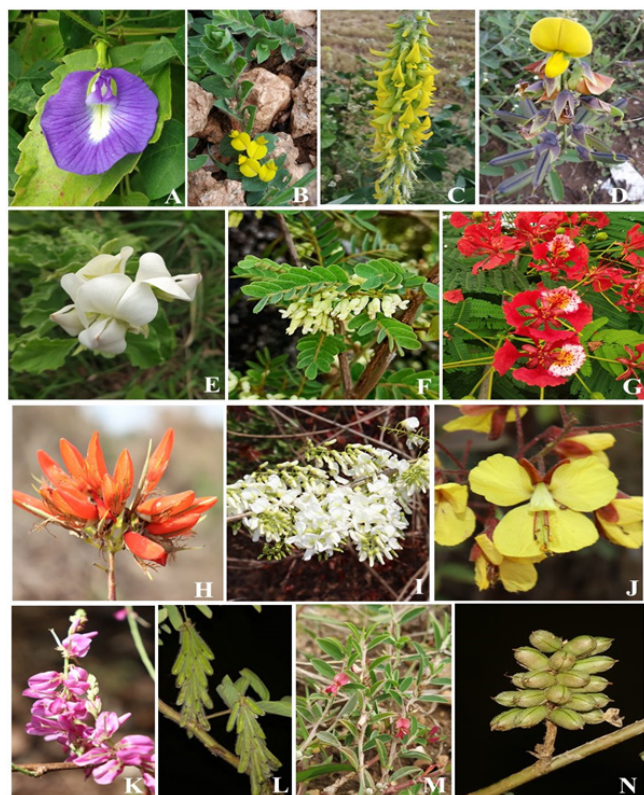


Figure 6: A. *Clitoria terneata* L.; B. *Crotalaria hebecarpa* (DC.) Rudd; C. *Crotalaria pallida* Aiton; D. *Crotalaria retusa* L.; E. *Crotalaria verrucosa* L.; F. *Dalbergia horrida* (Dennst.) Mabb.; G. *Delonix regia* (Hook.) Raf.; H. *Erythrina stricta* Roxb.; I. *Gliricidia sepium* (Jacq.) Walp.; J. *Hultholia mimosoides* (Lam.) Gagnon & G.P.Lewis; K. *Indigofera arrecta* Hochst. ex A. Rich.; L. *Indigofera astragalina* DC.; M. *Indigofera linifolia* (L.f.) Retz.; N. *Indigofera linnaei* Ali.

Singh 1988 Gamble 2008, Saldanha and Nicolson 1976 and Bhat 2014. The plant specimens collected were pressed and processed following the dry methods (Jain and Rao, 1977). Problematic and doubtful species were identified by direct comparison with identified specimens deposited in digital herbaria such as Herbarium JCB (accessed from January 2021–December 2023), Kew Herbarium Catalogue (accessed from January 2021–March 2024) and the nomenclature of plant species collected was updated using POWO (Plants of the world online Kew-science accessed from January 2021–April 2025). All leguminous taxa are grouped here according to the latest classification of Fabaceae (LPWG 2017) (Table 1). Conservation status of the plants as provided by the International Union Conservation of Nature (IUCN, 2024). The endemic status and distribution of the species were checked by referring to Endemic Vascular Plants of India (Singh *et al.* 2015; Makanur and Kotresha, 2024). Charts and maps are provided for subfamily-wise, habit-wise classification and study area, respectively. Colour figures important taxa are also provided for easy identification of species (Fig. 5, 6 & 7).



Figure 7: A. *Moullava spicata* (Dalzell) Nicolson; B. *Mucuna pruriens* (L.) DC.; C. *Neonotonia wightii* (Wight & Arn.) J.A. Lackey; D. *Neptunia oleracea* Loureiro E. *Paracalyx scariosus* (Roxb.) Ali; F. *Pithecellobium dulce* (Roxb.) Benth.; G. *Parkinsonia aculeata* L.; H. *Pongamia pinnata* (L.) Pierre; I. *Pterocarpus marsupium* Roxb.; J. *Rhynchosia cana* (Willd.) DC.; K. *Senegalia rugata* (Lam.) Britton & Rose; L. *Senna hirsuta* (L.) H.S.Irwin & Barneby; M. *Stylosanthes fruticosa* (Retz.) Alston; N. *Smithia sensitiva* Aiton; O. *Xylia xylocarpa* (Roxb.) Taub.

Results and Discussion

The present study on legumes of Haveri district, Karnataka recorded a total number of 131 species belonging to 72 genera (Table 1) which measures about 15% of the total flora. The habit-wise analysis shows that herbaceous flora is dominant with 50 species (38 %), followed by 44 tree species, 23 shrubs and 14 climbers. *Crotalaria* and *Senna* are the largest genera with 8 species each, followed by *Indigofera* with 7 species, *Alysicarpus* with 6 species, *Senegalia* with 5 species. The *Albizia*, *Dalbergia* and *Vigna* genera with 4 species each and *Aeschynomene*, *Bauhinia*, *Caesalpinia*, *Rhynchosia*, *Tephrosia* and *Vachellia* genera with 3 species each. Collected all the legumes of the district belong to four subfamilies of Fabaceae, viz., Cercidoideae, Detarioideae, Caesalpinioideae and Papilionoideae, of which Papilionoideae is the largest subfamily with 42 genera and 77 species, it contributes 59% of total legume flora, followed by the Caesalpinioideae (36%) with 47 species comes under 25 genera, Cercidoideae (3%) with 4 species belong to 2 genera and Detarioideae (2%) comprising of 3 species (Fig. 2, 3 & 4).

IUCN conservation status analysis shows that, *Dalbergia horrida* (Dennst.) Mabb. and *Pterocarpus marsupium* Roxb. comes under Near Threatened (NT) category, *Dalbergia latifolia* Roxb., *Saraca asoca* (Roxb.) W.J.de Wilde and *Senegalia ferruginea* (DC.) Pedley belongs to the Vulnerable (VU) category. *Vigna aconitifolia* (Jacq.) Maréchal comes under Data Deficient (DD) category, 54 species to the Least Concern (LC) category and the remaining 71 species belong to the Not Evaluated (NE) category. Some plants are habitat-specific and are endemic to the Indian subcontinent viz, *Moullava spicata* (Dalzell) Nicolson is endemic to Western ghats. *Crotalaria pusilla* Heyne ex Roth, *Crotalaria vestita* Baker and *Hardwickia binata* Roxb. species are endemic to Indian subcontinent (Makanur and Kotresha 2024).

Utilisation

Cajanus cajan (L.) Huth., *Cicer arietinum* L., *Glycine max* (L.) Merr., *Lablab purpureus* (L.) Sweet, *Macrotyloma uniflorum* (Lam.) Verdc., *Vigna radiata* (L.) R. Wilczek and *Vigna unguiculata* (L.) Walp. are major pulses. *Canavalia ensiformis* (L.) DC., *Cyamopsis tetragonoloba* (L.) Taub. and *Trigonella foenum-graecum* L. are used as vegetables. *Hardwickia binata* Roxb., *Leucaena leucocephala* (Lam.) de Wit., *Prosopis juliflora* (Sw.) DC and *Sesbania grandiflora* (L.) Poir. species were used as fodder for goats and sheep. Edible oil is extracted from the seeds of *Arachis hypogaea* L.

Some of the legumes were used as medicinal plants namely, *Abrus precatorius* L. and *Mucuna pruriens* (L.) DC. seeds are used as aphrodisiac. Flowers of *Senna auriculata* (L.) Roxb. were used against the vomiting and diarrhoea. *Mimosa pudica* L. and *Prosopis cineraria* (L.) Druce. to treat constipation and stomach cases. *Crotalaria pallida* Aiton to cure urinary tract problems. *Cassia fistula* L. dried powder of leaf is used to treat piles (Makanur and Kotresha, 2022a). Raw fruits of *Pithecellobium dulce* (Roxb.) Benth. and *Tamarindus indica* L. are marketed in local markets as edible fruits. Leaves of *Butea monosperma* (Lam.) Taubert is used in plate making and flowers of the *B. monosperma* (Lam.) Taubert and *Indigofera tinctoria* L. are used as dye-yielding plants. Seeds of *Pongamia pinnata* (L.) Pierre is used as raw material for the extraction of biodiesel. Gum exudates of *Senegalia catechu* (L.f.) P.J.H. Hurter & Mabb. and *Vachellia nilotica* (L.) P.J.H. Hurter & Mabb. are utilised by the local people. *Crotalaria juncea* L., *Desmanthus virgatus* (L.) Willd and *Gliricidia sepium* (Jacq.) Walp. are green manure-yielding plants available in the district.

Conclusion

The present study revealed 72 genera and 131 species of legumes in the Haveri district, Karnataka. Due to adaptability to the various geographical and ecological conditions, Fabaceae are the most dominant family of flora in the Haveri District. The habit-wise analysis shows that herbaceous flora is dominant (38 %). *Crotalaria*, *Senna*, *Indigofera*, *Alysicarpus*

and *Senegalia* are the dominant components of the district. Arid climatic and low rainfall conditions are favourable for farming several leguminous crops. Apart from these legumes are a source of many economically important products and medicinal plants. The present work will be helpful to the forest officials, policymakers, traditional medicinal practitioners, teachers, students and local people for the study and sustainable utilization of legumes in Haveri District.

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