

# SAHYADRI – FLORA AND ETHNOBOTANY

## *Report*

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## **ABSTRACT**

Amboli and Tillari are situated in the Northern Western Ghats of India which is one of the few remaining biodiversity hotspots. Home to semi-evergreen and evergreen vegetation, the floristic diversity offers several uses to local dwellers. This study is a floristic and ethnobotanical study of areas surrounding the village of Amboli and an ethnobotanical study of Tillari in the Western Ghats of India. In this study, we conducted a vascular plant inventory as well as field interviews of three different local plant healers of Amboli during different seasons and documented various uses of indigenous plants. We also conducted interviews of a local healer called *vaidus* of Tillari. Although indigenous plants are used for purposes such as fodder, rope making, and insecticides, many uses are medicinal in nature. This report lists 253 species of vascular plants belonging to 80 families of the Amboli area. Medicinal and household uses of 64 different species of Amboli and Tillari belonging to 43 different plant families have been listed. Local medicinal uses of plants range from treatment of skin conditions, digestive disorders, respiratory diseases, and wound dressing. Traditional knowledge of plants is at risk of being lost due to modernization making its documentation imperative. Tribal dependence on forest resources was determined to be very important although harvesting was undertaken in a sustainable manner leaving little impact on critical forest pockets.

## **INTRODUCTION**

Local plant uses have been studied extensively in India by various researchers (Grover et al. 2002, Muthu et al. 2006, Ayyanar and Ignacimuthu 2005). Approximately 1500 species of vascular plants are used for medicinal purposes by tribal and ethnic groups in India (Handa 1998). Preservation of traditional plant knowledge as a part of the global heritage has been championed by several authors (Lambert et al. 1997, Ayyanar and Ignacimuthu 2005). In the developing world, traditional medicinal uses of plants are often the only or primary healthcare available to people and are of extreme importance (Sheldon et al. 1997, Ghosh 2003). The Western Ghats of India and Sri Lanka together comprise a biodiversity hotspot and have more than 2000 endemic vascular plant species (Myers et al. 2000).

The present study is an ongoing study funded in part by the William L. Brown Fellowship and the National Geographic Society. This study focuses on a plant inventory and ethnobotany of forests surrounding Amboli, Maharashtra, India and ethnobotany of Tillari, Maharashtra, India. This study was conducted as a part of a broader scale vegetation and critical habitat survey encompassing several areas in the northern Western Ghats. The villages of Amboli and Tillari are sparsely developed and do not have medical facilities, hospitals, large markets, shopping malls, and most amenities offered by large cities. Although towns such as Sawantwadi and Belgaum are located close to both Amboli and Tillari, minimal transportation facilities, heavy monsoons, and steep mountains make the commute difficult and long. The villagers of Amboli and Tillari and inhabitants of surrounding forested land rely largely on local plant resources for

household purposes, medicinal properties, and food. This study is a documentation of various plant uses by local village dwellers and plant healers of Amboli and Tillari. The objectives of this study were: a) documentation of the vascular plant flora of Amboli ghats, b) documentation of various plant uses by village dwellers and tribal individuals of Amboli and Tillari, c) assessing dependency of tribal communities on forest resources and, d) impact of plant harvesting on critical forest pockets.

***Study Area:***

Amboli (15°57' N lat and 73°59'E long) is situated along the crest line of northern Western Ghats in the Sindhudurg District of Maharashtra, India (Figure 1). It is bound by Kolhapur District on the east and part of Belgaum District on the southeast, Ratnagiri District on the north, and the Arabian Sea on the west. The nearest city is Belgaum located 64 km east of Amboli. The topography of the Amboli area is undulating consisting of mountains interspersed by ravines. The average height of Amboli is 690m, with the tallest peak at 1100m above sea level. Amboli has a tropical higher elevation climate wherein the summer extends from March to May with temperatures ranging from 22° C to 40° C. The monsoon season begins in early June and lasts until October. Winters are mild from November to February with temperatures ranging from 12° C to 33° C. Amboli receives an annual rainfall of 745 cm while coastal areas like Deogad, Malwan and Vengurla (in Sindhudurg district) receive annual mean rainfalls of 295 cm, 215 cm and 217 cm respectively (Yadav and Sardesai, 2002).

The village of Tillari (15°47' N lat and 74°18'E long) is situated south of Amboli, in the Kolhapur District of Maharashtra, India (Figure 2). It is bound by Sidhudurg and

Ratnagiri Districts on the west, Sangli District on the north, the state of Karnataka on the east, and the state of Goa on the south. The hamlet of Tillari is nestled in the Western Ghats and is isolated from major towns or cities. The steep mountain pass called Tillari Ghats provides access to the village. The average height of the Tillari Ghats is between 800m to 1000m above sea level. The nearest city is Belgaum located about 60 km northeast of Tillari. Both, Amboli and Tillari are located in the southern part of the Sahyadri Mountains, a name given to the northern Western Ghats within the state of Maharashtra. The climate, geology, and rainfall of Tillari are very similar to that of Amboli.

The landscape of the area is influenced by lava flows. The major part of the area is covered by basaltic floors commonly known as Deccan traps. These are thought to have been formed during the upper cretaceous to the lower Eocene periods. The basal section is of dense and dark basalt and the upper section is altered reddish basalt which is easily weathered. Such flows extend over very large areas and impart a step-like appearance to the plateaus. Laterite soils are of common occurrence and their color varies from bright to brownish red due to hydrated iron-oxides and they are acidic. The general texture of the soil is loamy and depth varies from 0.35-1m. The bedrock of Tillari is granite with soils derived from it.

Predominant vegetation in the Amboli region of the northern Western Ghats is of semi evergreen type with few, scattered evergreen patches. A few sacred groves such as Sadachi Rai comprise evergreen vegetation with species of *Memecylon*, *Syzigium*, and *Actinodaphne*. Semi evergreen vegetation is present in areas along the upper elevation above 500m on the western side of the mountains. Moist deciduous forests gradually

change into semi evergreen forests along the altitude gradient. These patches are also confined to sheltered ravines and valleys. Such forests are seen in the Amboli Ghats, Amboli-Malai Jungle, and Ramghat, which is located east of Amboli. Arboreal growth is luxuriant with an abundance of lianas and epiphytes. Tillari and adjacent mountains also comprise tropical semievergreen forests (Yadav and Sardesai, 2002). Tillari ghats show an abundance of luxuriant bamboo stands, *Bambusa arundinacea* (Retz.) Willd. Tillari forms a habitat corridor for large mammals such as elephants and tigers. The semi evergreen forests of Tillari are also dominated by species of an endemic palm *Ochlandra*.

The village of Amboli is sparsely developed and does not have medical facilities, hospitals, markets, shopping malls, and most amenities offered by large cities. Although towns such as Sawantwadi and Belgaum are located close to Amboli at 24 km and 64 km respectively, minimal transportation facilities, heavy monsoons, and steep mountains make the commute difficult and long. The villagers of Amboli largely rely on local plant resources for household purposes, medicinal properties, and food. The village of Tillari is smaller than the village of Amboli with a complete absence of shops, markets, doctors, hospitals, grocery stores, etc. Other villages which offer a few of the aforementioned amenities are several kilometres away and have to be accessed by vehicles. Village dwellers do not possess private transportation and live an isolated life in Tillari. They depend heavily on natural resources obtained from forests for their day to day needs. Household income of many village dwellers is less than \$1 per day.

## **MATERIALS AND METHODS**

The original study site, Mahabaleshwar also located in the Northern Western Ghats or Sahyadris, was replaced by Amboli and Tillari. Collaborations with scientists from ATREE (Ashoka Trust for Research in Ecology and the Environment), Bangalore and Abasaheb Garware College, Pune led to selection of less explored areas in the Sahyadris. Although Mahabaleshwar has not been floristically explored in the past five to ten years, prior studies have been conducted. After repeated attempts of trying to obtain written permits to work in the mountains surrounding Mahabaleshwar, we were unable to get permission from the Forestry Department of the Government of India. I decided to collaborate with local scientists who already had permits for Amboli in the state of Maharashtra. This project is a part of a larger undertaking funded by the National Geographic Society to conduct ethnobotanical studies and floristic surveys for Amboli and adjacent areas as well as forest reserves in the Southern Western Ghats in the state of Karnataka.

We conducted this study from December 2007 to March 2009. During this period, we made five field trips to Amboli and interviewed four different plant healers known as *vaidus* in the local vernacular language (Marathi). We also conducted two field trips to Tillari and interviewed one tribal plant healer (*vaidu*). Interviews consisted of structured and unstructured conversations, taped interviews, field visits to adjacent forests, and home visits to five *vaidu* dwellings. Two of these plant healers were a father-daughter combination and belonged to the *Gurav* tribe (Figure 3). The third plant healer belonged to the *Gavde* clan. The plant healer at Tillari belonged to the *Naik* caste. We obtained verbal permission to publish this information along with their names and photographs. We collected voucher specimens of plants that were problematic to identify and curated

them at the herbarium located at the Ashoka Trust for Research in Ecology and the Environment (ATREE), Bangalore. Repeated field visits ensured an exhaustive list of most species growing in the study area. We took high resolution images for all plant species we encountered. Taxa were identified using Yadav and Sardesai 2002 and various other local floras.

The *Gurav* caste or tribe consists of people who are traditional temple managers and act as priests (Claus 2003). The study area is near the coastal strip called Konkan and the *Guravs* of the Konkan area are known as *Bhavika Guravs*. Traditionally they function as priests for shrines of village gods and goddesses that are constructed on the outskirts of villages. These village gods are called *Gramadevatas* and differ from the conventional Hindu gods. Members of the *Gurav* caste are usually neither literate nor have any secular or formal education concerning rituals (Claus 2003). They speak a local dialect of Marathi which is the prevalent and official language of the state of Maharashtra. However, the *vaidus* of the *Gurav* caste that we interviewed had been plant healers for several generations and preserved their knowledge only by verbal communication to their offspring. The *Gavdes* belong to the *Dhangar* tribe which traditionally constitutes shepherds and cattle breeders who rear cows and buffalos (Pathak 2008). Kashiram Gavde, our informant belongs to the *Mahadeo Koli* caste which is a socio economically deprived caste and a part of the Scheduled Tribe. However, Mr. Gavde is a government employee and works as a caretaker of a medicinal plant conservation area (MPCC). His knowledge of medicinal plants has enabled him to acquire this job to earn a livelihood. The *vaidu* we interviewed at Tillari belonged to an agricultural caste called the *Naik*

caste. He has lived in a small shack like dwelling near Tillari for several decades and is the local medicine man.

## **RESULTS**

### ***Floristic Study***

This study recorded 253 taxa of vascular plants from the Amboli Ghats belonging to 80 different plant families. The family with the highest number of taxa was the Fabaceae with 22 taxa followed by Euphorbiaceae with 16 taxa and Rubiaceae with 15 taxa (Figure 3). Of these, three species viz. *Elaeagnus conferta* Roxb. *Glochidion ellipticum* Wight and *Nothopegia castanaefolia* (Roth) Ding Hou are listed “endangered” by the International Union for Conservation of Nature (IUCN). Two species viz. *Dalbergia latifolia* and *Myristica malabarica* Lam. are listed “vulnerable” by the IUCN. *Holigarna grahamii* Kurz, *Impatiens pulcherrima* Dalzell, *Myristica malabarica* Lam., *Pittosporum dasycaulon* Miq. and *Wendlandia thyrsoides* var. *lawii* (Hook.f.) Cowan are listed “rare” by the Botanical Survey of India. The Conservation Assessment and Management Plan (CAMP) formulated by the Government of Maharashtra lists the status of conservation worthy plants. According to this plan, *Rauvolfia serpentina* (L.) Benth. ex Kurz is listed “critical”, *Oroxylum indicum* (L.) Kurz and *Nothapodytes nimmoniana* (J. Graham) Mabb. are listed “endangered”, *Capparis moonii* Wight and *Garcinia indica* Choisy are “near threatened”, and *Mucuna monosperma* (Roxb.) DC. *Embelia tsjeriamcottam* A.DC. *Rubia cordifolia* L. and *Symplocos racemosa* Roxb. are “vulnerable” (Table 1).

We divided the species list into the following categories of growth form or habit of plants: herbs, shrubs, climbers, lianas (woody climbers), and trees. Trees exhibit maximum species richness of 125 (49%), followed by herbs and shrubs at 49 and 50 (20%) respectively, 24 climbers at 10% and 4 lianas at 2% (Figure 4).

### ***Ethnobotanical Use***

We documented 64 taxa belonging to 43 different plant families that were used by tribal and village folk of Amboli and Tillari. These plants were used for medicinal, cultural or religious, food, timber, and other household purposes. Figure 5. represents various categories of plant uses and number of taxa applicable to each category. Of these, 43 taxa were used for medicinal purposes to cure various disorders which ranged from diabetes, ear infections, antiseptics, joint pains, digestive problems, and snake bites. Table 2. lists all taxa documented in this study along with their uses and the specific plant part or organ used by villagers and *vaidus*. 14 taxa were considered edible and used frequently in village households for cooking, making drinks, or chewing as recreational drugs. We have lumped these uses under the category of “food”. Cultural and household uses included timber for making tools, fish bait, fodder, pesticides, religious rituals involving use of flowers and leaves, rope making, and creating mulch. *Rauvolfia serpentina* also known as Snakeroot in the western world is a plant of conservation concern and is used to cure snake bites (Figure 7). Some medicinal plants are also used in Ayurvedic medicine and these include *Asparagus racemosus*, species of *Terminalia*, and *Zanthoxylum rhetsa*. Plants used by *vaidus* and villagers are harvested for the use of different organs such as bark, bulb, leaves, flowers, fruits, root, stem, wood, seeds, and

latex. Some taxa were harvested for multiple uses. Often more than one organ was harvested for each plant in such cases. Figure 6. is a bar chart representing the different plant organs used by *vaidus* and villagers of Amboli and Tillari.

## **DISCUSSION**

Our floristic study shows the richness and diversity of Amboli forests. Since our study was conducted over one year, it may not have included the numerous herbaceous plants that are short lived and appear only during heavy monsoons. During the monsoon season from June-August, heavy rains make the village of Amboli completely inaccessible to city dwellers. Several villagers face adverse conditions from severe weather and use entire plants (fern fronds) or large leaves of palm trees to thatch roofs and protect their dwellings from flooding. Despite taking precautions during the monsoon, children and elderly people are killed every year from severe rains and flooding. Rains leading to floods and landslides prevent exploration of adjacent forests. This is the largest factor in the possible under exploration of these forests. Obtaining permission to visit pristine forests of Tillari in an effort to document the flora and collect samples resulted in a failure due to lack of permit sanction from the Government of India. The village of Tillari is surrounded by Tillari Ghats which are home to dense bamboo forests dominated by species of bamboo and palms. These forests serve as corridors for tigers and elephants and need to be explored botanically. Although we intended to conduct a biodiversity survey in these forests, we were unable to obtain the permission. Amboli and Tillari forests, both hold the potential and high probability of housing plant

species not described to science. Many of these species may be visible due to short flowering times which occur in the monsoon. Researchers who may be able to live in the Amboli area for the entire length of the monsoon and explore the adjacent forests will have a strong chance of expanding our existing plant list and adding unknown species to it. The forests of Tillari are little explored and acquiring permits from the Government of India would help take the first steps in conducting biodiversity surveys. We recommend that the Government of India take steps in conserving the forests immediately adjacent to the Amboli Ghats since they harbor a myriad of endemic plant species and are home to several rare and endangered species. Amboli is gaining popularity as a tourist destination and has a few small motels in it. It also has one large resort complex built amongst the mountains with significant destruction to adjacent forests. Since the population of India is growing at a fast pace, forests such as those at Amboli and Tillari may be short lived. These forests comprise global biodiversity hotspots and need to be protected against commercialization. Although some forest pockets are protected as “sacred groves” as a result of religious and ritualistic practices, the area they occupy is a fraction of that which needs to be protected. These forests are indeed conservation worthy and we recommend that the Forest Department take steps in conservation of the remaining forests.

The village dwellers of Amboli and Tillari are heavily dependent on forest resources for their daily needs. This study has documented the variety of plants and their uses by native dwellers. Some plants such as species of *Garcinia* and *Asparagus racemosus* are more commonly used than others due to their abundance in local forests and popularity amongst native people. Since Amboli and Tillari are relatively isolated villages, native people do not have ready access to commercial products and therefore

have to make maximum use of natural resources. Due to this, there are several plants that have more than one traditional use as well as the use of more than one plant organ such as roots or leaves. This isolation of village dwellers is even more pronounced in Tillari which is accessible only via steep roads. Interviews conducted at each household in the village of Tillari would give us a complete idea on local dependence of villagers to forest resources as a means of sustenance. We hope to conduct these interviews in the future as a part of ongoing ethnobotanical research. Some plants such as *Rauvolfia serpentina* and *Strychnos nux-vomica* which we documented in our study contain alkaloids and other active ingredients that do have medicinal properties. Other species used by *vaidus* do not have any previously documented uses and have no biochemical studies conducted to prove their medicinal properties. We recommend future biochemical studies on all the plants used by *vaidus* to assess the validity of the plant as a drug. Other species of some plants such as *Smilax* documented in our study are used in other parts of the world as sources of food while the indigenous people of the Western Ghats use locally available species as a food source. During our numerous interviews and interactions with village dwellers, we noticed a growing reluctance of future generations to learn and preserve ethnobotanical knowledge, especially in the village of Amboli which is slowly being exposed to modernization and tourism. Therefore studies like ours are valuable in the documentation and preservation of local plant knowledge.

Plants such as snakeroot (Figure 7.) which are of conservation worthy status are often harvested repeatedly by *vaidus* for their roots. Uprooting these plants inevitably destroys several individuals leading to extirpation of taxa that are already under threat. While we did observe some overharvesting of plant products like bark of *Persea*, we did

not notice any overharvesting of rare or threatened plants for medicinal use. Overall, the *vaidus* we interviewed and the villagers we encountered were aware that if they overharvested a certain plant, it would result in depletion of resources causing a direct threat to their livelihood and sustenance. This acute awareness of remote village dwellers, especially those at Tillari will perhaps ensure continued growth of useful plants and preservation of forests.

## **ACKNOWLEDGEMENTS**

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## **REFERENCES**

- Ayyanar, M. and S. Ignacimuthu. 2005. Traditional knowledge of Kani tribals in Kouthalai of Tirunelveli hills, Tamil Nadu, India. *Journal of Ethnopharmacology*. Volume 102. Issue 2. pp. 246-255.
- Claus P. J., Sarah Diamond, Margaret Ann Mills. 2003. South Asian folklore: an encyclopedia. New York: Routledge.
- Ghosh A. 2003. Herbal folk remedies of Bankura and Medinipur districts, West Bengal (India), *Indian Journal of Traditional Knowledge*. Volume 2. pp. 393–396.
- Grover J. K., Yadav S, Vats V. 2002. Medicinal plants of India with anti-diabetic potential. *Journal of Ethnopharmacology*. Volume 81. Issue 1. Pp. 81-100.
- Handa, S.S. 1998. Indian efforts on standardization and quality control of medicinal plants using scientific parameters. *Amruth (The Traditional Healthcare Magazine) 2* (1998), p. 10.
- Lambert, J. Srivastava and N. Vietmeyer. 1997. Medicinal Plants. Rescuing a Global Heritage. The World Bank. Washington, DC. p. 61.
- Muthu C., A. Muniappan, N. Raja and S. Ignacimuthu. 2006. Medicinal plants used by traditional healers in Kancheepuram District of Tamil Nadu, India. *Journal of Ethnobiology and Ethnomedicine*. 2:43.
- Norman Myers, Russell A. Mittermeier, Cristina G. Mittermeier, Gustavo A. B. da Fonseca & Jennifer Kent. 2000. Biodiversity hotspots for conservation priorities. *Nature* 403, 853-858.
- Sheldon W., M.J. Balick and S.A. Laird. 1997. Medicinal plants: can utilization and conservation coexist? *Advances in Economic Botany. Economic Botany*. Volume 12. pp. 1–104.
- Yadav S. R. and Sardesai M. M. 2002. *Flora of Kolhapur District*. Shivaji University, Kolhapur, India.

Figure 1. Map of Amboli: a) Map of India, b) Close view of Maharashtra, c) Aerial image of Amboli and surrounding ghats and landscape picture.

a) Map of India



c) Aerial image of Amboli



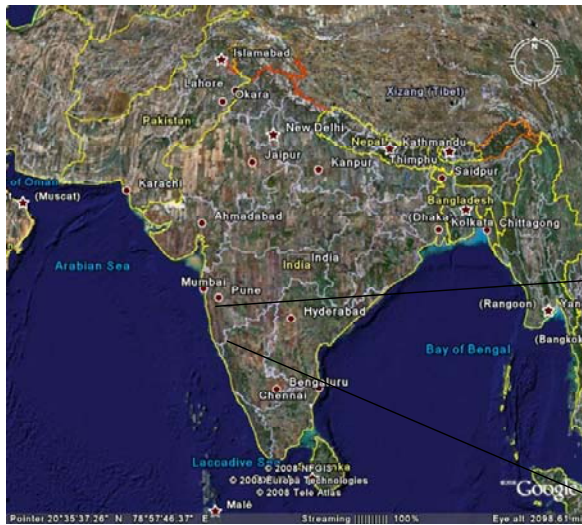
b) Map of Maharashtra





Figure 2. Map of Tillari: a) Map of India, b) Close view of Maharashtra, c) Aerial image of Tillari and surrounding ghats and landscape picture.

a) Map of India



c) Aerial image of Tillari



b) Map of Maharashtra





Tillari Landscape

Figure 3. Species Rich Plant Families of Amboli: Bar chart represents the ten most well represented vascular plant families in terms of species richness from the Amboli region.

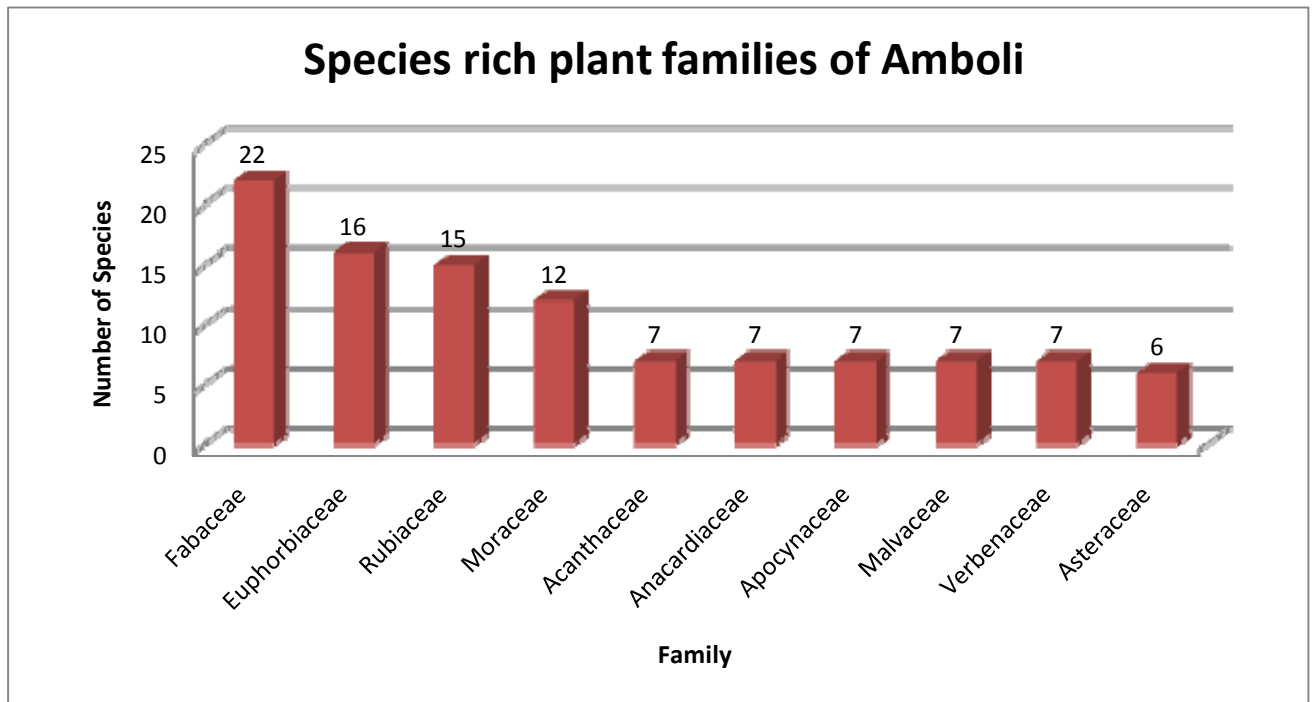


Figure 4. Growth form of plants of Amboli. Pie chart indicates percentage of plants in following categories of growth form: herb, shrub, climber, liana, and tree.

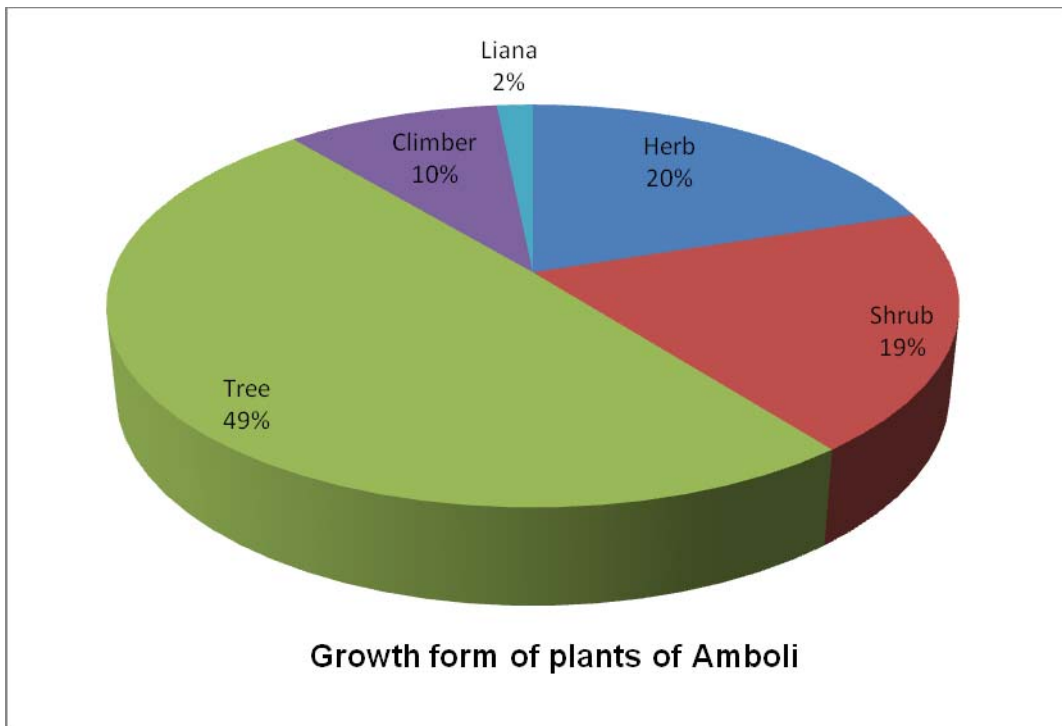


Figure 5. Traditional Uses of Plants of the Western Ghats: Bar Chart representing various plant uses by tribal people and village dwellers of the Amboli and Tillari regions of the Western Ghats.

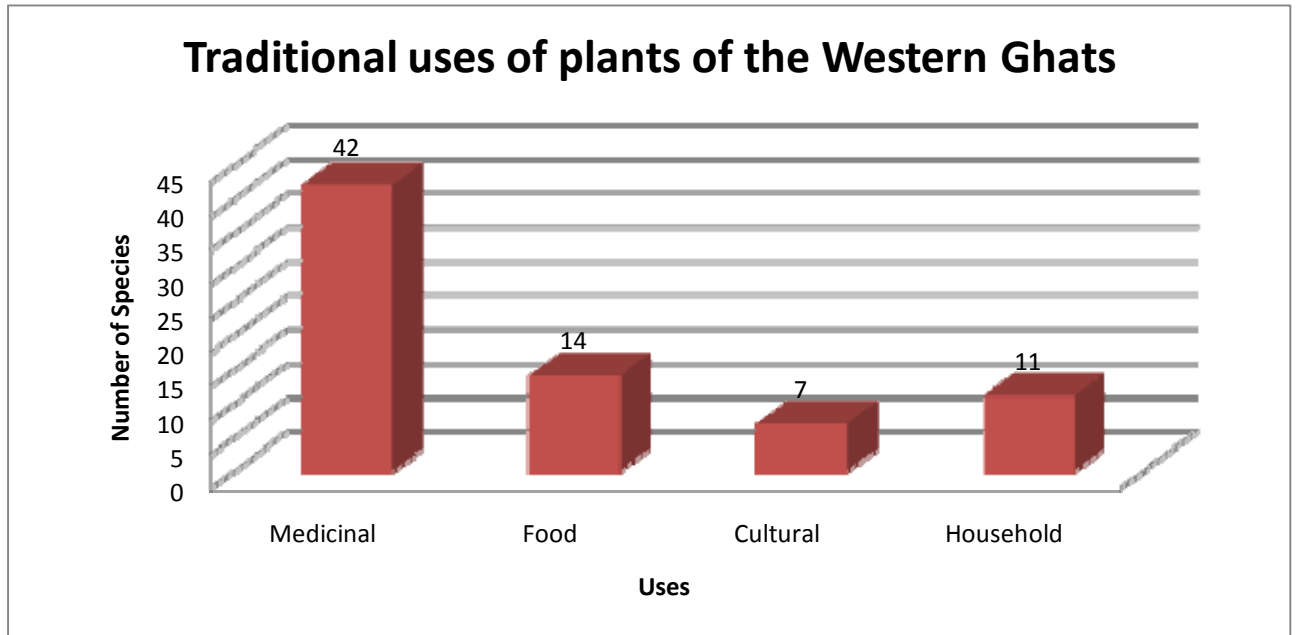


Figure 6. Plant organs used in Traditional Medicine. Bar chart depicting various plant organs used by tribal *vaidus* of the Amboli and Tillari regions of the Western Ghats.

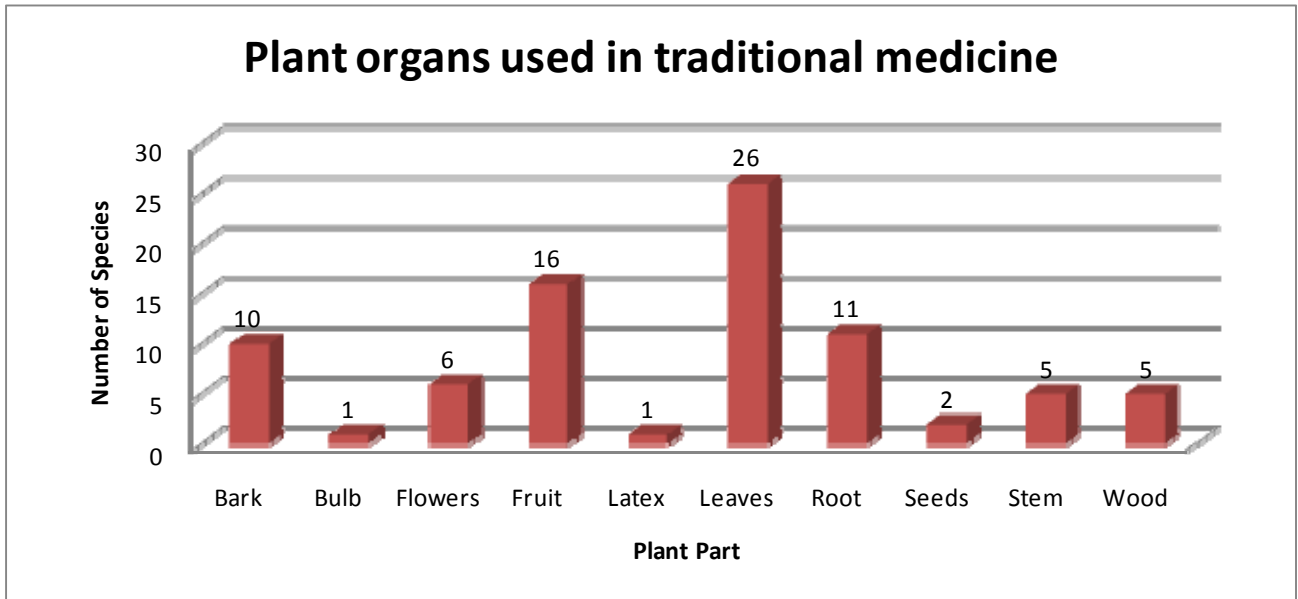


Figure 7: *Rauvolfia serpentina* – Snakeroot or Sarpagandha (Apocynaceae) is of critical conservation status and is harvested by tribals for its roots that are thought to cure snake bites.



Table 1: List of taxa recorded from Amboli Ghats. Column 1 indicates plant species. Plant genus is stated where the taxon was not identified to species level. Column 2 indicates plant family. Column 3 has plant habit which has been divided into following categories: herb, shrub, tree, climber, and liana. Columns 4-6 indicate conservation status of species according to the International Union for Conservation of Nature (IUCN), Conservation Assessment Management Plan (CAMP), and Botanical Survey of India (BSI) respectively.

Plant Species	Family	Habit	IUCN	CS	BSI
<i>Barleria</i> L. sp.	Acanthaceae	Herb			
<i>Blepharis</i> Juss. sp.	Acanthaceae	Herb			
<i>Neuracanthus sphaerostachys</i> Dalzell	Acanthaceae	Herb			
<i>Pleocaulus ritchiei</i> Bremek.	Acanthaceae	Herb			
<i>Carvia callosa</i> Bremek.	Acanthaceae	Shrub			
<i>Justicia santapau</i> Bennet	Acanthaceae	Herb			
<i>Thelepaepale ixiocephala</i> (Benth.) Bremek.	Acanthaceae	Shrub			
<i>Buchanania lanzan</i> Spreng.	Anacardiaceae	Tree			
<i>Lannea coromandelica</i> (Houtt.) Merr.	Anacardiaceae	Tree			
<i>Mangifera indica</i> L.	Anacardiaceae	Tree			
<i>Spondias pinnata</i> (L. f.) Kurz	Anacardiaceae	Tree			
<i>Holigarna beddomei</i> Hook. f.	Anacardiaceae	Tree			
<i>Holigarna grahamii</i> Kurz	Anacardiaceae	Tree			Rare
<i>Nothopegia castanaefolia</i> (Roth) Ding Hou	Anacardiaceae	Tree	EN		
<i>Ancistrocladus heyneanus</i> Wall.ex J. Graham	Ancistrocladaceae	Shrub			
<i>Uvaria narum</i> (Dunal) Blume.	Annonaceae	Tree			
<i>Meiogyne pannosa</i> (Dalzell) J. Sinclair	Annonaceae	Tree			
<i>Polyalthia fragrans</i> Bedd.	Annonaceae	Tree			
<i>Alstonia scholaris</i> (L.) R.Br.	Apocynaceae	Tree			
<i>Carissa congesta</i> Wight	Apocynaceae	Shrub			
<i>Carissa inermis</i> Vahl	Apocynaceae	Shrub			
<i>Holarrhena pubescens</i> Wall. ex G. Don	Apocynaceae	Tree			
<i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz	Apocynaceae	Shrub		CR	
<i>Tabernaemontana alternifolia</i> L.	Apocynaceae	Tree			
<i>Wrightia tinctoria</i> R. Br.	Apocynaceae	Tree			
<i>Amorphophallus</i> Blume ex Decne.	Araceae	Herb			
<i>Arisaema</i> L. sp.	Araceae	Herb			
<i>Colocasia</i> Schott. sp.	Araceae	Herb			
<i>Pothos scandens</i> L.	Araceae	Climber			
<i>Schefflera elliptica</i> (Blume) Harms	Araliaceae	Climber			
<i>Calamus rotang</i> Linn.	Arecaceae	Liana			

<i>Caryota urens</i> L.	Areaceae	Tree			
<i>Gymnema sylvestre</i> (Retz.) R. Br. ex Schult.	Asclepiadaceae	Shrub		NT	
<i>Hemidesmus indicus</i> (L.) R. Br. ex Schult.	Asclepiadaceae	Shrub			
<i>Holostemma annulare</i> (Roxb.) K. Schum	Asclepiadaceae	Herb			
<i>Tylophora dalzellii</i> Hook. f.	Asclepiadaceae	Herb			
<i>Tylophora</i> R. Br. sp.	Asclepiadaceae	Herb			
<i>Ageratum conyzoides</i> L.	Asteraceae	Herb			
<i>Artemisia</i> L. sp.	Asteraceae	Herb			
<i>Blumea lacera</i> (Burm.f.) DC.	Asteraceae	Herb			
<i>Cyathocine</i> sp.	Asteraceae	Herb			
<i>Elephantopus scaber</i> L.	Asteraceae	Shrub			
<i>Eupatorium</i> L. sp.	Asteraceae	Shrub			
<i>Impatiens pulcherrima</i> Dalzell	Balsaminaceae	Herb			Rare
<i>Impatiens acaulis</i> Arn.	Balsaminaceae	Herb			
<i>Impatiens balsamina</i> L.	Balsaminaceae	Herb			
<i>Impatiens</i> L. sp.	Balsaminaceae	Herb			
<i>Begonia crenata</i> Dryand.	Begoniaceae	Herb			
<i>Heterophragma quadriloculare</i> (Roxb.) K. Schum.	Bignoniaceae	Tree			
<i>Oroxylum indicum</i> (L.) Kurz	Bignoniaceae	Tree		EN	
<i>Bombax ceiba</i> L.	Bombacaceae	Tree			
<i>Capparis moonii</i> Wight	Capparaceae	Climber		NT	
<i>Capparis sepiaria</i> L.	Capparaceae	Shrub			
<i>Vaccaria</i> Wolf sp.	Caryophyllaceae	Herb			
<i>Celastrus paniculatus</i> Willd.	Celastraceae	Climber		LC	
<i>Gymnosporia rothiana</i> (Walp.) M. A. Lawson	Celastraceae	Tree			
<i>Lophopetalum wightianum</i> Arn.	Celastraceae	Tree			
<i>Salacia</i> L. sp.	Celastraceae	Shrub			
<i>Garcinia indica</i> Choisy	Clusiaceae	Tree		NT	
<i>Garcinia talbotii</i> Raiz. & Sant.	Clusiaceae	Tree			
<i>Mesua ferrea</i> L.	Clusiaceae	Tree			
<i>Calycopteris floribunda</i> (Roxb.) Lam.ex Poir.	Combretaceae	Shrub			
<i>Combretum</i> Loefl. sp.	Combretaceae	Climber			
<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Tree			
<i>Terminalia chebula</i> Retz.	Combretaceae	Tree			
<i>Terminalia elliptica</i> Willd.	Combretaceae	Tree			
<i>Connarus</i> L. sp.	Connaraceae	Shrub			
<i>Tali minor</i> (Gaertn.) M. R. Almeida	Connaraceae	Climber			
<i>Argyreia cymosa</i> (Roxb.) Sweet	Convolvulaceae	Climber			
<i>Cyperus</i> L. sp.	Cyperaceae	Herb			
<i>Dichapetalum gelonioides</i> (Roxb.) Engl.	Dichapetalaceae	Shrub			
<i>Dillenia pentagyna</i> Roxb.	Dilleniaceae	Tree			
<i>Dioscorea bulbifera</i> L.	Dioscoreaceae	Climber			
<i>Dioscorea hispida</i> Dennst.	Dioscoreaceae	Climber			
<i>Dioscorea pentaphylla</i> L.	Dioscoreaceae	Climber			
<i>Diospyros candolleana</i> Wight	Ebenaceae	Tree			
<i>Diospyros montana</i> Roxb.	Ebenaceae	Tree			
<i>Diospyros nigrescens</i> (Dalzell) C. J. Saldanha	Ebenaceae	Tree			
<i>Diospyros oocarpa</i> Thwaites	Ebenaceae	Tree			

<i>Elaeagnus conferta</i> Roxb.	Elaeagnaceae	Tree	EN		
<i>Elaeocarpus serratus</i> L.	Elaeocarpaceae	Tree			
<i>Aporosa lindleyana</i> (Wight) Baill.	Euphorbiaceae	Tree			
<i>Breynia</i> J. R. Frost. & G. Frost. sp.	Euphorbiaceae	Shrub			
<i>Bridelia retusa</i> (L.) A. Juss.	Euphorbiaceae	Tree			
<i>Bridelia scandens</i> (Roxb.) Willd	Euphorbiaceae	Shrub			
<i>Cleidion spiciflorum</i> (Burm.f.) Merr.	Euphorbiaceae	Tree			
<i>Homonoia riparia</i> Lour.	Euphorbiaceae	Shrub			
<i>Jatropha curcas</i> L.	Euphorbiaceae	Tree			
<i>Macaranga peltata</i> (Roxb.) Müll. Arg.	Euphorbiaceae	Tree			
<i>Mallotus philippensis</i> (Lam.) Müll. Arg.	Euphorbiaceae	Tree			
<i>Sapium insigne</i> (Royle) Benth. & Hook. f.	Euphorbiaceae	Tree			
<i>Tragia involucrata</i> L.	Euphorbiaceae	Climber			
<i>Blachia denudata</i> Benth.	Euphorbiaceae	Tree			
<i>Dimorphocalyx lawianus</i> (Müll. Arg.) Hook. f.	Euphorbiaceae	Tree			
<i>Drypetes venusta</i> (Wight) Pax & K. Hoffm.	Euphorbiaceae	Tree			
<i>Glochidion ellipticum</i> Wight	Euphorbiaceae	Tree	EN		
<i>Mallotus stenanthus</i> Müll. Arg.	Euphorbiaceae	Tree			
<i>Acacia concinna</i> (Willd.) DC.	Fabaceae	Tree			
<i>Albizia odoratissima</i> (L.f.) Benth	Fabaceae	Tree			
<i>Albizia stipulata</i> (DC.) Boivin	Fabaceae	Tree			
<i>Butea monosperma</i> (Lam.) Taub.	Fabaceae	Tree			
<i>Cassia fistula</i> L.	Fabaceae	Tree			
<i>Cassia tora</i> L.	Fabaceae	Herb			
<i>Dalbergia horrida</i> Graham	Fabaceae	Climber			
<i>Dalbergia latifolia</i> Roxb.	Fabaceae	Tree	VU		
<i>Derris scandens</i> (Roxb.) Benth.	Fabaceae	Climber			
<i>Desmodium</i> Desv. sp.	Fabaceae	Herb			
<i>Desmodium velutinum</i> (Willd.) DC.	Fabaceae	Shrub			
<i>Entada rheedei</i> Spreng.	Fabaceae	Liana			
<i>Flemingia strobilifera</i> (L.) R. Br.	Fabaceae	Herb			
<i>Mimosa pudica</i> L.	Fabaceae	Herb			
<i>Moullava spicata</i> (Dalzell) Nicolson	Fabaceae	Shrub			
<i>Mucuna monosperma</i> (Roxb.) DC.	Fabaceae	Climber		VU	
<i>Mucuna pruriens</i> (L.) DC.	Fabaceae	Climber			
<i>Pongamia pinnata</i> (L.) Pierre	Fabaceae	Tree			
<i>Saraca asoca</i> (Roxb.) De Wilde	Fabaceae	Tree			
<i>Smithia</i> Aiton sp.	Fabaceae	Herb			
<i>Xylia xylocarpa</i> Taub.	Fabaceae	Tree			
<i>Dalbergia sympatheticum</i> Nimmo	Fabaceae	Shrub			
<i>Casearia championii</i> Thwaites	Flacourtiaceae	Tree			
<i>Casearia esculenta</i> auct. Non Roxb.	Flacourtiaceae	Tree			
<i>Flacourtia montana</i> J. Graham	Flacourtiaceae	Tree			
<i>Epithema carnosum</i> Benth.	Gesneriaceae	Herb			
<i>Gnetum ula</i> Brongn.	Gnetaceae	Liana			
<i>Bambusa arundinacea</i> Retz.	Gramineae	Herb			
<i>Salacia chinensis</i> L.	Hippocrateaceae	Shrub			
<i>Curculigo orchoidis</i> Gaertn.	Hypoxidaceae	Herb			

<i>Nothapodytes nimmoniana</i> (J. Graham) Mabb.	Icacinaceae	Tree		EN	
<i>Leucas stelligera</i> Wall. ex Benth	Lamiaceae	Herb			
<i>Cinnamomum verum</i> J. Presl	Lauraceae	Tree			
<i>Litsea deccanensis</i> Gamble	Lauraceae	Tree			
<i>Litsea floribunda</i> Gamble	Lauraceae	Tree			
<i>Neolitsea cassia</i> (L.) Kosterm.	Lauraceae	Tree			
<i>Persea macrantha</i> (Nees) Kosterm	Lauraceae	Tree			
<i>Careya arborea</i> Roxb.	Lecythidaceae	Tree			
<i>Leea indica</i> (Burm. f.) Merr.	Leeaceae	Shrub			
<i>Utricularia striatula</i> Sm.	Lentibulariaceae	Herb			
<i>Asparagus racemosus</i> Willd.	Liliaceae	Herb			
<i>Lobelia nicotianaeifolia</i> Roth ex R. & S.	Lobeliaceae	Shrub			
<i>Strychnos nux-vomica</i> L.	Loganiaceae	Tree			
<i>Lagerstroemia microcarpa</i> Wight	Lythraceae	Tree			
<i>Woodfordia fruticosa</i> (L.) Kurz.	Lythraceae	Shrub			
<i>Hibiscus furcatus</i> Willd.	Malvaceae	Herb			
<i>Hibiscus schizopetalus</i> (Dyer ex Mast.) Hook. f.	Malvaceae	Herb			
<i>Hibiscus</i> L. sp.	Malvaceae	Herb			
<i>Kydia calycina</i> (Roxb.)	Malvaceae	Tree			
<i>Sida acuta</i> Burm. f.	Malvaceae	Herb			
<i>Sida rhombifolia</i> L.	Malvaceae	Herb			
<i>Urena lobata</i> L.	Malvaceae	Shrub			
<i>Memecylon umbellatum</i> Burm. f.	Melastomaceae	Tree			
<i>Memecylon wightii</i> Thwaites	Melastomaceae	Tree			
<i>Aglaia</i> Lour. sp.	Meliaceae	Tree			
<i>Dysoxylum binectariferum</i> (Roxb.)Hook. f. ex Bedd.	Meliaceae	Tree			
<i>Naregamia alata</i> Wight & Arn.	Meliaceae	Herb			
<i>Trichilia connaroides</i> (Wight & Arn.) Bentv.	Meliaceae	Tree			
<i>Turraea villosa</i> Bennet	Meliaceae	Shrub			
<i>Aglaia lawii</i> (Wight) Saldanha	Meliaceae	Tree			
<i>Cissampelos pareira</i> L.	Menispermaceae	Climber			
<i>Cocculus</i> DC. sp.	Menispermaceae	Climber			
<i>Cyclea peltata</i> Hook. f. & Thoms.	Menispermaceae	Climber			
<i>Diploclisia glaucescens</i> (Blume)	Menispermaceae	Liana			
<i>Smilax zeylanica</i> L.	Menispermaceae	Climber			
<i>Ficus amplissima</i> J.E.Smith	Moraceae	Tree			
<i>Ficus arnottiana</i> Miq.	Moraceae	Tree			
<i>Ficus asperrima</i> Roxb.	Moraceae	Tree			
<i>Ficus benghalensis</i> L.	Moraceae	Tree			
<i>Ficus callosa</i> Willd.	Moraceae	Tree			
<i>Ficus exasperata</i> Vahl	Moraceae	Tree			
<i>Ficus gibbosa</i> Blume	Moraceae	Tree			
<i>Ficus racemosa</i> L.	Moraceae	Tree			
<i>Ficus religiosa</i> L.	Moraceae	Tree			
<i>Ficus</i> L. sp.	Moraceae	Tree			
<i>Fluggea</i> Wight. sp.	Moraceae	Shrub			
<i>Artocarpus hirsutus</i> Lam.	Moraceae	Tree			
<i>Myristica malabarica</i> Lam.	Myristicaceae	Tree	VU		Rare

<i>Knema attenuata</i> Warb.	Myristicaceae	Tree			
<i>Ardisia solanacea</i> Roxb.	Myrsinaceae	Shrub			
<i>Embelia tsjeriam-cottam</i> A.DC.	Myrsinaceae	Shrub		VU	
<i>Maesa indica</i> (Roxb.) A. DC.	Myrsinaceae	Shrub			
<i>Syzygium caryophyllatum</i> (L.) Alston	Myrtaceae	Tree			
<i>Syzygium cumini</i> (L.) Skeels.	Myrtaceae	Tree			
<i>Syzygium phillyraeoides</i> (Trimen) Santapau	Myrtaceae	Shrub			
<i>Olea dioica</i> Roxb.	Oleaceae	Tree			
<i>Jasminum malabaricum</i> Wight	Oleaceae	Shrub			
<i>Ligustrum perrotteti</i> A. DC.	Oleaceae	Shrub			
<i>Aerides dalzelliana</i> (Santapau)Garay	Orchidaceae	Herb			
<i>Habenaria</i> Willd. sp.	Orchidaceae	Herb			
<i>Eria dalzelli</i> Lindl.	Orchidaceae	Herb			
<i>Pandanus odoratissimus</i> L. f.	Pandanaceae	Tree			
<i>Passiflora</i> L. sp.	Passifloraceae	Climber			
<i>Piper nigrum</i> L.	Piperaceae	Climber			
<i>Piper</i> L. sp.	Piperaceae	Climber			
<i>Pittosporum dasycaulon</i> Miq.	Pittosporaceae	Tree			Rare
<i>Polygonum</i> L. sp.	Polygonaceae	Shrub			
<i>Clematis gouriana</i> Roxb. ex DC.	Ranunculaceae	Climber			
<i>Scutia</i> (Comm. ex A. DC.) Brongn. sp.	Rhamnaceae	Shrub			
<i>Carallia brachiata</i> (Lour.) Merr.	Rhizophoraceae	Tree			
<i>Anthocephalus cadamba</i> (Roxb.) Miq.	Rubiaceae	Tree			
<i>Canthium angustifolium</i> Roxb.	Rubiaceae	Shrub			
<i>Canthium dicoccum</i> (Gaertn.) Merr.	Rubiaceae	Tree			
<i>Canthium rheedei</i> DC.	Rubiaceae	Climber			
<i>Catunaregam spinosa</i> (Thumb.) Tirveng.	Rubiaceae	Tree			
<i>Ixora coccinea</i> L.	Rubiaceae	Shrub			
<i>Ixora pavetta</i> Andrews	Rubiaceae	Shrub			
<i>Mitragyna parvifolia</i> (Roxb.) Korth.	Rubiaceae	Tree			
<i>Mussaenda frondosa</i> L.	Rubiaceae	Shrub			
<i>Ophiorrhiza rugosa</i> Wall.	Rubiaceae	Herb			
<i>Pavetta indica acut.non</i> L.	Rubiaceae	Shrub			
<i>Rubia cordifolia</i> L.	Rubiaceae	Herb		VU	
<i>Hymenodictyon obovatum</i> Wall.	Rubiaceae	Tree			
<i>Ixora brachiata</i> Roxb.	Rubiaceae	Tree			
<i>Wendlandia thyrsoides</i> var. <i>lawii</i> (Hook.f.) Cowan	Rubiaceae	Tree			Rare
<i>Atlantia racemosa</i> Wt.	Rutaceae	Tree			
<i>Clausena indica</i> (Dalzell) Oliv.	Rutaceae	Tree			
<i>Glycosmis pentaphylla</i> (Retz.) DC.	Rutaceae	Tree			
<i>Murraya koenigii</i> (L.) Spreng.	Rutaceae	Tree			
<i>Zanthoxylum rhetsa</i> DC.	Rutaceae	Tree			
<i>Euodia lunu-ankenda</i> (Gaertn.) Merr.	Rutaceae	Tree			
<i>Osyris</i> L. sp.	Santalaceae	Shrub			
<i>Allophylus cobbe</i> Raeusch	Sapindaceae	Shrub			
<i>Dimocarpus longan</i> Lour.	Sapindaceae	Tree			
<i>Lepisanthes tetraphylla</i> (Vahl) Radlk.	Sapindaceae	Tree			
<i>Sapindus laurifolius</i> Vahl	Sapindaceae	Tree			

<i>Schleichera oleosa</i> (Lour.) Oken	Sapindaceae	Tree			
<i>Xantolis tomentosa</i> (Roxb.) Raf.	Sapotaceae	Tree			
<i>Verbascum</i> L. sp.	Scrophulariaceae	Herb			
<i>Helicteres isora</i> L.	Sterculiaceae	Shrub			
<i>Pterospermum acerifolium</i> Willd.	Sterculiaceae	Tree			
<i>Sterculia guttata</i> Roxb.	Sterculiaceae	Tree			
<i>Sterculia urens</i> Roxb.	Sterculiaceae	Tree			
<i>Symplocos racemosa</i> Roxb.	Symplocaceae	Tree		VU	
<i>Gnidia glauca</i> (Fresen.) Gilg.	Thymelaeaceae	Tree			
<i>Grewia microcos</i> L.	Tiliaceae	Tree			
<i>Grewia serrulata</i> DC.	Tiliaceae	Tree			
<i>Grewia tiliifolia</i> Vahl	Tiliaceae	Tree			
<i>Triumfetta</i> L. sp.	Tiliaceae	Shrub			
<i>Celtis timorensis</i> Span.	Ulmaceae	Tree			
<i>Holoptelea integrifolia</i> Rendle	Ulmaceae	Tree			
<i>Boehmeria</i> Jacq. sp.	Urticaceae	Herb			
<i>Debregeasia</i> Gaudich. sp.	Urticaceae	Tree			
<i>Callicarpa tomentosa</i> Murray	Verbenaceae	Tree			
<i>Clerodendrum inerme</i> (L.) Gaertn	Verbenaceae	Shrub			
<i>Clerodendrum</i> L. sp.	Verbenaceae	Shrub			
<i>Clerodendrum viscosum</i> Vent.	Verbenaceae	Shrub			
<i>Gmelina arborea</i> Roxb. ex Sm.	Verbenaceae	Tree			
<i>Tectona grandis</i> L. f.	Verbenaceae	Tree			
<i>Vitex negundo</i> L.	Verbenaceae	Tree			
<i>Costus speciosus</i> (J. König) Sm.	Zingiberaceae	Herb			
<i>Curcuma pseudomontana</i> J. Graham	Zingiberaceae	Herb			
<i>Zingiber neesatum</i> (J. Graham) Ramamoorthy	Zinziberaceae	Herb			
<i>Drosera burmannii</i> Vahl	Droseraceae	Herb			
<i>Drynaria quercifolia</i> (L.) J. Sm.	Polypodiaceae	Herb			
<i>Ziziphus rugosa</i> Lam.	Rhamnaceae	Shrub			

Table 2: List of plants used by plant healers of Amboli and Tillari. Scientific names are arranged alphabetically by genus. Family names are indicated after species names and are followed by common local (vernacular) names. Traditional plant uses and plant part used are indicated.

Species Name	Family	Vernacular Name	Use	Part Used
<i>Aerides dalzelliana</i> Garay	Orchidaceae	Kanphodi	Ear Drops	Root
<i>Allophylus cobbe</i> Blume	Sapindaceae	Tivati	Antiseptic	Leaf
<i>Alstonia scholaris</i> (L.) R. Br.	Apocynaceae	Satwin	Cultural, Diabetes	Bark
<i>Asparagus racemosus</i> Wild.	Liliaceae	Siteche Kes	Food	Root
<i>Callicarpa tomentosa</i> Hook. & Arn.	Verbenaceae	Aesar	Woodworking	Wood
<i>Calycopteris floribunda</i> (Roxb.) Poir.	Combretaceae	Baguli	Cultural/Religious	Flower
<i>Careya arborea</i> Roxb.	Lecythidaceae	Kumbhi	Antiseptic, Rope making	Bark
<i>Caryota urens</i> L.	Areceaeae		Rope making	Flower
<i>Cassia fistula</i> L.	Fabaceae	Bahawa	Throat	Fruit/Leaf
<i>Catunaregam spinosa</i> (Thunb.) Triveng.	Rubiaceae	Gela	Pesticide, Woodworking	Wood
<i>Celastrus paniculatus</i> Wild.	Celastraceae	Kangal	Fish Bait, Muscle pain	Fruit/Seed
<i>Celtis timorensis</i> Span.	Ulmaceae	Brumaj	Digestive	Leaf
<i>Cyclea peltata</i> Diels	Menispermaceae	Pahad Wel	Digestive	Leaf
<i>Dalbergia horrida</i> Graham	Fabaceae	Kalig	Antiseptic	Leaf
<i>Dendrocalamus strictus</i> (Roxb.) Nees	Poaceae	Bamboo	Food	Shoots Stem
<i>Dillenia pentagyna</i> Roxb.	Dilleniaceae	Karmel	Digestive	Bark
<i>Dioscorea hispida</i> Dennst.	Dioscoreaceae	Shendwel	Food	Bulb/Leaf
<i>Diospyros nigrescens</i> C.J. Saldanha	Ebenaceae	Kaling	Antiseptic, Food	Fruit/Leaf/Stem
<i>Drynaria quercifolia</i> (L.) J. Sm.	Polypodiaceae		Muscular	Rhizome
<i>Elaeagnus conferta</i> Roxb.	Elaeagnaceae	Nerada	Food	Fruit
<i>Elephantopus scaber</i> L.	Asteraceae	Gojeebh	Kidney stone	Root
<i>Embelia basaal</i> A. DC.	Myrsinaceae	Ambati	Antihelmentic	Fruit/Root
<i>Eupatorium</i> L. sp.	Asteraceae	Ranmodi	Antiseptic	Leaf
<i>Ensete superbum</i> (Roxb.) Chessman	Musaceae	Rankeli	Food	Leaf/Flower
<i>Ficus racemosa</i> L.	Moraceae	Rumbad	Food, Antiseptic	Fruit/Latex
<i>Ficus exasperata</i> Vahl	Moraceae		Jaundice	Bark/Roots
<i>Garcinia indica</i> Choisy	Clusiaceae	Kokam	Digestive	Bark/Fruit
<i>Glochidion ellipticum</i> Wight	Euphorbiaceae	Bhoma	Timber	Wood
<i>Glycosmis pentaphylla</i> (Retz.) DC.	Rutaceae	Chirgondha	Digestive	Leaf
<i>Gnetum ula</i> Brongn.	Gnetaceae	Nagotrin	Eye wash	Fruit
<i>Gnidia glauca</i> (Fresen.) Gilg	Thymeleaceae	Datpadi	Cultural/Religious	Flower/Leaf
<i>Gymnema sylvestre</i> (Retz.) R. Br. ex Shult.	Asclepiadaceae		Diabetes/Hypertension	Leaf
<i>Hemidesmus indicus</i> (L.) R. Br.	Asclepiadaceae	Anantmul	Digestive	Roots
<i>Heterophragma quadrilocularae</i> K.Schum.	Bignoniaceae	Kusaga	Antiseptic	Leaf
<i>Ixora barchiata</i> Roxb.	Rubiaceae	Malwa	Muscular	Bark
<i>Leea indica</i> (Burm. f.) Merr.	Vitaceae	Dinda	Antiseptic	Leaf
<i>Leucas stelligera</i> Wall.	Lamiaceae		Food	Leaf
<i>Ligustrum perrotetii</i> A. DC.	Oleaceae	Kapashi	Antiseptic, Cultural	Flower/Stem
<i>Litsea floribunda</i> Gamble	Lauraceae	Dadeghotum	Antiseptic	Bark
<i>Luffa acutangula</i> (L.) Roxb.	Cucurbitaceae	Phagul	Food	Fruit
<i>Mallotus philippensis</i> (Lam.) Mull. Arg.	Euphorbiaceae	Kunku	Timber, Cultural	Wood/Seeds
<i>Memecylon umbellatum</i> Burm. f.	Melastomaceae	Anjani	Mulch	Leaf
<i>Mucuna pruriens</i> Scop.	Fabaceae		Deworming	Leaf
<i>Mussaenda</i> L. sp.	Rubiaceae	Sherwad	Cultural/Religious	Flower
<i>Naregamia alata</i> Wight & Arn.	Meliaceae		Kidney stone/Digestive	Leaf/Roots
<i>Nothopegia castaneifolia</i> (Roth) Ding Hou	Anacardiaceae	Aameri	Antiseptic	Leaf
<i>Persea macrantha</i> (Nees) Kosterm.	Lauraceae	Gulum	Bone setting	Bark
<i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz	Apocynaceae	Sarpagandha	Snake bite	Root
<i>Schleichera oleosa</i> (Lour.) Oken	Sapindaceae	Kusumb	Digestive	Fruit
<i>Sida acuta</i> Burm. f.	Malvaceae	Ghota	Food	Leaf
<i>Smilax zeylanica</i> L.	Smilacaceae	Ghotwel	Antiseptic	Leaf/Root
<i>Solanum anguivi</i> Lam.	Solanaceae	Chichardi	Digestive	Fruit

<i>Smithia</i> Aiton sp.	Fabaceae		Food	Leaf
<i>Strychnos nux-vomica</i> L.	Loganiaceae	Kajari	Digestive	Bark
<i>Syzygium caryophyllaeum</i> Gaertn.	Myrtaceae	Pawsali Jambhul	Food	Fruit
<i>Tabernaemontana alternifolia</i> L. ORRoxb.	Apocynaceae	Tagar	Digestive	Bark/Leaf
<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Combretaceae	Behda	Food	Fruit
<i>Terminalia chebula</i> Retz.	Combretaceae	Hirda	Cough	Fruit
<i>Tinospora cordifolia</i> (Willd.) Miers	Menispermaceae	Gulwel	Fever	Stem
<i>Turraea villosa</i> Benn.	Meliaceae	Tafshin	Antihelmentic	Root
<i>Vitex negundo</i> L.	Verbenaceae	Nirgudi	Arthritis, Pesticide, Cultural	Leaf/Flower
<i>Xantolis tomentosa</i> (Roxb.) Raf.	Sapotaceae	Katekumbhal	Fodder	Leaf
<i>Xylia xylocarpa</i> Taub.	Fabaceae		Kidney Stones	Leaf
<i>Zanthoxylum rhetsa</i> (Roxb.)DC.	Rutaceae	Triphal	Food	Fruit