



Survey And Documentation Of Climbing Plant Species In The Vellambi Forest In Kanniyakumari District.

Shasheela P^{1*} and Uma R²

^{1*}Research Scholar, Reg No: 21213152262014, Department of Botany, S.T.Hindu College, Nagercoil.

²Assistant Professor, Department of Botany, S.T.Hindu College, Nagercoil. (Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli-627 012, Tamil Nadu, India). shasheelap@gmail.com

***Corresponding Author:** Shasheela P

^{*}Research Scholar, Reg No: 21213152262014, Department of Botany, S.T.Hindu College, Nagercoil.

ABSTRACT

In Kanniyakumari District's Vellambi Forest, a study was conducted to identify climbing plants and their practical use. Climbing plants can be woody or slender, but they have an unusual ability to circumnutate. They frequently possess unique morphological features that facilitate their ascent. They have been divided into several categories, such as tendrillar, twiners, creepers, climbers, etc., based on their habits and alterations. There were 27 climbing plants found in all. They are divided into 16 families, which correspond to 23 genera and 27 species. The study area's leading families include Convolvulaceae and Cucurbitaceae, each with four species; Fabaceae and Vitaceae follow with three species apiece, and Dioscoreaceae has two species. Eleven families, however, were monospecific. Locating the sources of climber in the Vellambi forest.

Keywords: cucurbitaceae, survey, climber, Vellambi forest

INTRODUCTION:

Based on the form of the stem, climbing plants or climbers can be roughly classified into two groups: vines and lianas (Caballe 1998). A vine is an herbaceous, relatively thin-stemmed climber that primarily inhabits areas that are either highly lighted or disturbed. The morning glory (Convolvulaceae) and gourd (Cucurbitaceae) families contain a wide variety of herbaceous vines.

As a common characteristic of tropical forests, climbing plants are more abundant and diverse than those found in temperate forests (Givnish & Vermeij 1976; Grubb 1977; Putz 1984; Gentry 1991; Richards 1996). Their presence is frequently a key physiognomic feature that distinguishes tropical from temperate forests (Reddy & Parthasarathy 2003; Schnitzer & Bongers 2002; Nabe-Nielsen 2001; Perez-Salicrup et al. 2001).

The current climatological trend has led to an increase of climbing plants in tropical woods (Malhi & Wright 2004). Plant species classified as climbers rely on other plants for support to grow upwards through their canopy thanks to structural features. The vast variety of climbing found in the tropical jungle plants, some of which are enormous, medium-sized, and tiny. They exhibit starting range of green forms that are twisted and twining, greatly influenced by their surroundings (Singh and associates, 2015).

MATERIALS AND METHODS

A. Study Area

The present study is to collect the information of traditional uses of edible fruits used by the people of Vellambi forest. Vellambi forest is situated at Thovalai taluk, Kanya Kumari district. It is bounded by Thadikkaran Konam in south, Mara Malai in the north and Perunchani dam in the west. It is 27 kilometers away from Nagercoil. The people who lives in this area is called as 'kanikaran'. The word kanikaran means hereditary proprietor of the land. Its total population is 200. In which the number of literates is 23 and illiterates are 177. A very old Kali Temple is situated ½ km away from Vellambi forest. The natural vegetation of this region represents biomass ranging from Southern thorn forests to evergreen hill shoals with grass downs. This region comprises of a large number of edible fruits.

B. Data Collection

In the field study, the botanical knowledge of kani tribals was collected by the informal interviews to the elder peoples, between the age group of 50 and 90. The local name of the plants, uses, useful parts, cultural activities and indigenous technical knowledge were recorded. Plants were studied with reference to their local name, binomial, habit, description, useful parts and medicinal values by referring standard books and photographs were taken.

C. Plan of presentation of data:

Families are arranged in the alphabetic order and the species are also arranged alphabetically under each family. Each genus includes its correct name with author citation and species is provided with the correct name and author citation.

RESULT

They are 16 families with a total of 27 climbing plants known (Table.1). The highest family contributions among these were from the Convolvulaceae and Cucurbitaceae, with 4 species each. Each family, Fabaceae and Vitaceae, has 3 species. The Dioscoreaceae family has 2 species. The outcome with Shah *et al.*, (2013) findings.

Rich diversity has been reported in tropical regions by earlier investigations (Jayakumar and Nair 2013; Phillips and Miller 2002). A similar result was found in the current study, indicating a high correlation between the general type and location of forests and the regional distribution of climbing plant species. In addition, characteristics of trees like flaky and rough bark might have an impact on where some climbing plant species are found (Van der Heijden *et al* 2008).

Table 1. List of plants recorded from the study area:

Botanical Name	Common Name	Local Name	Family	Form of Uses/Recipe
<i>Abrus precatorius</i> L.	Rosary pea	Kunni muthu	Fabaceae	Dried leaves and root powder is given orally in case of eye complaint
<i>Allamanda cathartica</i> L.	Golden trumpet	Manjal patti	Apocynaceae	To induce vomiting in low dosage, as a high dosage can be toxic.
<i>Antigonon leptopus</i> Hook & Arn.	Mexican creeper	Ladies necklace flower	Polygonaceae	Leaves used in the Caribbean as poultices for boils and swelling.
<i>Aristolochia indica</i> L.	Indian birthwort	Karuda kodi	Aristolochiaceae	The root is used in skin diseases and heals wounds
<i>Asparagus racemosus</i> Willd.	Shatavari	Shatavari	Asparagaceae	Whole plant use Diabetes.
<i>Asystasia gangetica</i> (L.) T. Anderson	Chinese violet	Vaadai poo	Acanthaceae	Roots that have been powdered are used to cure snakebites and stomach aches.
<i>Basella alba</i> L.	Malabar spinach	keerai	Chenopodiaceae	Pulped leaves used to treat boils and sores.
<i>Bougainvillea spectabilis</i> Willd.	Great bouganvillea	Paper poo	Nyctaginaceae	Ornamental
<i>Cardiospermum halicacabum</i> L.	Ballloon vine	Ulincha	Sapidaeae	This plant is used for the treatment of abdominal pain.
<i>Cayratia pedata</i> (Lam.) Gagnep.	Birdfoot grapevine	Kaatu pirandai	Vitaceae	It is used as treating ulcers.
<i>Cayratia trifolia</i> (L.) Mabb. & J.Wen	Fox grape	Kaatu pirandai	Vitaceae	Paste of tubers applied to snake bites
<i>Cissus quadrangularis</i> L.	Veld grape	Pirandai	Vitaceae	People use joint pain, low bone mass
<i>Clerodendrum thomsoniae</i> Balf.f.	Bleeding-heart vine	Kadalapoovu	Lamiaceae	Ornamental
<i>Clitoria ternatea</i> L.	Butterfly pea	Sanku pushpam	Fabaceae	It is used to memory enhancer
<i>Coccinia grandis</i> (L.) Voigt	Ivy gourd	Kovaikai	Cucurbitaceae	Used to Currie
<i>Combretum indicum</i> (L.) DeFilipps	Rangoon creeper	Maalai poo	Combretaceae	Ornamental
<i>Derris involuta</i> (Sprague) Sprague	Jewel vine	Kaatu kodi	Fabaceae	A strong insecticide and fish poison.
<i>Dioscorea bulbifera</i> L.	Air potato	Siru kizhangu	Dioscoreaceae	Cooking
<i>Dioscorea hispida</i> Dennst.	Three- leaved yam	kizhangu	Dioscoreaceae	Cooking
<i>Distimake dissectus</i> (Jacq.) A.R.Simoes & Staples	Alamo vine	Alamo kodi	Convolvulaceae	Poison plant
<i>Ipomoea indica</i> (Burm.f.)	Blue dawn flower	Neela poo chedi	Convolvulaceae	Cure wound healing

<i>Ipomoea obscura</i> (L.) Ker Gawl.	Small whit morning glory	Vella poo chedi	Convolvulaceae	Used anti-inflammatory
<i>Ipomoea quamoclit</i> L.	Cypress vine	Ootu padathi	Convolvulaceae	Ornamental
<i>Luffa aegyptiaca</i> Mill.	Sponge gourd	Chavuri kodi	Cucurbitaceae	Fruit is used to cleaning the vessels
<i>Melothria pendula</i> L.	Creeping cucumber	Padarum vellari	Cucurbitaceae	Cure wound healing
<i>Mikania micrantha</i> Kunth	Bitter vine	Kattu kodi	Asteraceae	Wound dressing and healing of sores
<i>Momordica charantia</i> L.	Bitter gourd	pagarkai	Cucurbitaceae	Cooking

CONCLUSION

Climbers provide great promise for providing millions of tribals and forest inhabitants in India's western ghats with a means of subsistence and survival tactics. The study found that are 27 species climbing plants in 16 groups. Certain foods are ingested raw, while others are eaten cooked through. These highly nutritious food plants are devoid of synthetic additives. Therefore, protecting the Vellambi forest is crucial for the sake of our future generations.

ACKNOWLEDGEMENT

The authors wish to thank Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli-627 012, Tamil Nadu, India.

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