



The Family Asclepiadaceae R.Br. in Nandurbar District (Maharashtra)

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ABSTRACT

The present paper reports 15 species under 13 genera of Asclepiadaceae from Nandurbar district of Maharashtra. The members are herbs, shrubs and climbers. The genus *Calotropis* and *Tylophora* are represented by two species each and other genera with single species. The family also called as the milky weed family, as the taxa are wild and containing milky latex. The family is closely related to Apocynaceae. Both the families have some close characters such as gynoeceum with two carpels, apocarpous pistil, fruits are follicle and seeds have a coma of long hairs.

KEYWORDS

Asclepiadaceae, Nandurbar District.

INTRODUCTION:

Nandurbar district is situated in Northern part of the state of Maharashtra bordering the state Gujarat and Madhya Pradesh. It is the most tribal district of Khandesh. As near about seventy percent of tribal population. The aborigines inhabiting the district are Bhil, Pawara, Tadvi, Mavachi, Kokani. They are mainly dependent on forest products and living in Satpuda Mountain. A primarily pantropical family with only few genera occurring in temperate region. The members are perennial herbs, shrubs or rarely small trees, Sometimes fleshy or cactus like and generally with milky sap. The family Asclepiadaceae consists of 320 genera and more than 1800 species (Lawrence, 1951). In India, the family is represented by 35 genera and 234 species, out of which 172 species are endemic. The leaves are usually simple opposite decussate or even whorled. The flowers are bisexual, regular, pentamerous and hypogynous. Stamens five filaments short or none, fused with the gynoeceum to form gynostegium. Pollen in one or two sacs called pollinia. The fruit is a pair of follicle with winged seeds.

MATERIALS AND METHODS:

The plant materials were procured from various places like Toranmal, Amblihari, Leghapani and Kakarda and other places of Nandurbar districts. The field work carried out in different seasons, encompassing every nook and corner of the district. Herbarium specimens were prepared by using customary methods and are deposited in the Department of Botany, P. S. G. V. P. Mandal's Arts, Science and Commerce College, Shahada Dist- Nandurbar, Maharashtra. The data pertaining to botanical name, habit, flowering and fruiting period and occurrence were particularly noted during the study. Plants were identified by using, The Flora of Presidency of Bombay (Cook, 1958), Flora of Maharashtra State (Singh, Karthikeyan, 2000, 2001), Flora of Dhule and Nandurbar Districts (Maharashtra), (Patil, 2003).

DISCUSSION:

The Asclepiadaceous members in the district are little in numbers. Most of the taxa are having a single species except *Calotropis* and *Tylophora* with two species each. *Asclepias curassavica* and *Tylophora indica* is suffruticose herb. *Marsdenia tenacissima* and *Pergularia daemia* are woody climbers. As the members are containing milky sap, they are also used for medicinal purpose. The young seeds of *Pentatropis spiralis* are eaten raw. The stem bark of *Pergularia daemia* is used to dress maggot infected wounds of cattle and leaf extract mixed with honey cures cough. The members of the family divided in to two sub families, Periplocoideae and Cyanchoideae on the basis of free stamens and pollinia respectively. The flowers of Asclepiadaceae are characterized by the presence of

hood, known as corona. The corona is of two types, corolline corona and stamina corona. The corolline corona is scale or hairy outgrowths arise from petals. The stamina corona is outgrowth arise from the stamina tube. The stamina corona present in the genus *Asclepias*, *Calotropis*, *Caralluma*, *Cosmostigma*, *Holostemma*, *Leptadenia*, *Mardenia*, *Sarcostemma*, *Stapelia*, *Tylophora* and *Wattakaka*. The corolline corona is present in the genus *Pentatropis* and *Pergularia*. The corolline corona of *Pergularia* is double, outer annular membranous while inner alternating with outer corona. In the genus *Stapelia* corona in two series and arising from the stamina column. The leaves of *Stapelia* are very much reduced and represented by spines and scales. In the genus *Asclepias* and *Calotropis* the flowers are being arranged in umbellate cyme. The flowers in Asclepiadaceae are usually small but in the genus *Stapelia* flowers are quite large in size.

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Table-I: Enumeration of Asclepiadaceae taxa:

Sr. No.	Botanical Name	Habit	Flowering and Fruiting Period	Frequency occurrence
1	<i>Asclepias curassavica</i> L.	Suffruticose herb	Almost throughout the year	Cultivated as an ornamental plant
2	<i>Calotropis gigantea</i> (L.) R.Br.	Stout shrub	Almost throughout the year	Frequent in wastelands
3	<i>Calotropis procera</i> (Ait) R.Br.	Erect shrub	Almost throughout the year	Very common and abundant in wasteland
4	<i>Caralluma adscendens</i> (Roxb.) R.Br.	Succulent herb	Feb.- Sept.	Common on rocky slopes of hills
5	<i>Cosmostigma racemosum</i> (Roxb.) Wight.	Perennial twiner	Aug. - Oct.	In hilly forest
6	<i>Holostemma ada-kodien</i> Schult.	Climber	Aug. - Oct.	On trees and shrubs in forest areas
7	<i>Leptadenia reticulata</i> (Retz.) Wight.	Twining shrub	Apr. - Jul.	Frequent along river, stream banks, on hedges.
8	<i>Marsdenia tenacissima</i> (Roxb.) Moon.	Woody climber	June- Sept.	Occasional on edges of fields

9	<i>Pentatropis spiralis</i> (Forsk.) Decne.	Slender twiner	July- Octo.	Occasional in hedges along roads, fields
10	<i>Pergularia daemia</i> (Forsk.) Chiov	Woody twiner	Sept.- March	Common on edges of fields, garden, wasteland
11	<i>Sarcostemma acidum</i> (Roxb.) Voigt.	Succulent shrub	July- Octo.	Occasional in dry rocky habitats
12	<i>Stapelia grandiflora</i> Massion.	Leafless herb	March- May	Planted in garden
13	<i>Tylophora dalzellii</i> Hook.	Twiners	Aug.- Dec.	Occasional in bushes
14	<i>Tylophora indica</i> (Burm.f.) Merr.	Suffruticose herb	July- Sept.	Occur as forest undergrowth
15	<i>Wattakaka volubilis</i> (L.f.) Stapf.	Twining shrub	Feb. - April	Common in wasteland

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