



Census of the Family Cucurbitaceae Juss. in Nandurbar District (Maharashtra)

**Dr. SANTOSH KADU
TAYADE**

Head, Department of Botany, P. S. G. V. P. Mandal's Arts, Science and Commerce College, Shahada, Dist-Nandurbar, 425 409 (M.S.)

**Prof. MAHESH
BHOLEHAR JAGTAP**

Department of Botany, P. S. G. V. P. Mandal's Arts, Science and Commerce College, Shahada, Dist-Nandurbar, 425 409 (M.S.)

ABSTRACT

The present paper reports 27 species under 15 genera of Cucurbitaceae from Nandurbar district of Maharashtra. The majority is annual or perennial weak stemmed trailing or decumbent climber. The genus *Cucumis* represented by five species and the genus *Coccinia*, *Corallocarpus*, *Ctenolepis*, *Diplocyclos*, *Kedrostis*, *Lagenaria*, *Mukia* and *Solena* having single species. The family also called as the pumpkin family. The family is closely related to Campanulaceae. Both the families have some close characters of androecium. The fruits are usually large in size, fleshy berry called pepo.

KEYWORDS

Cucurbitaceae, Nandurbar District, Maharashtra

INTRODUCTION:

Nandurbar district is situated in Northern part of the state of Maharashtra bordering the states Gujarat and Madhya Pradesh. It is the most tribal district of Khandesh and has 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. The family Cucurbitaceae consists of 110 genera and 640 species (Lawrence, 1951). The family enjoys a wide distribution in the tropical and subtropical region. In India, the family accounts of 37 genera and nearly 97 species, most of which are cultivated all over the country. The members are herbs or shrubs climbing by means of tendrils. The flowers are tetracyclic, actinomorphic, pentamerous, unisexual, epigynous with petals often united. The stamens are often connate forming synandrium. The gynoecium consist of three carpels, syncarpous, ovary inferior with parietal placentation

MATERIALS AND METHODS:

The plant materials were procured from various places like Akarani, Toranmal, Amblibari, 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 members of the genus *Ctenolepis*, *Momordica*, *Coccinia*, *Cucumis*, *Corallocarpus*, *Solena* and *Mukia* bears simple tendril while the members of the genus *Benincasa*, *Cucurbita*, *Diplocyclos*, *Lagenaria*, *Luffa* and *Trichosanthes* are having branched tendrils. In the *Citrullus colocynthis* tendrils are simple whereas in *Citrullus lanatus* tendrils are robust and bifid. In *Citrullus*, the stamens of the particular pairs are united by the filament as well as anther forming synandria. In *Cucurbita*, the anthers are sinuous and they unite together forming a central column. In the genera *Solena* plant is dioecious and stamens are inserted at the base of calyx tube while in the genera *Corallocarpus* and *Kedrostis* plant monoecious

and stamens are inserted at the mouth of calyx tube. In the genera *Diplocyclos* male flowers are arranged in cluster and both male and female flowers are present on the same axis of the leaves. Most of the members are cultivated for their fruits and commonly their flowering and fruiting period between July-December.

A monotypic order Cucurbitaceae forms a link between Rubiales and Campanulales. The family Cucurbitaceae as a very advanced taxon of the sympetalae on account of usual gamopetalous corolla, epigyny together with didyly and elaborate complex nature of the androecium which resulted from the various types of cohesion of the stamens, particularly in synandrium formation. The family Cucurbitaceae bears close affinity with Campanulaceae which can be proved by the fact that in Campanulaceae the stamens also have the tendency to form synandrium besides the similar corolla and calyx structure as Cucurbitaceae.

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Table-I: Enumeration of Cucurbitaceae taxa:

Sr. No.	Botanical Name	Habit	Flowering and Fruiting Period	Frequency occurrence
1	<i>Benincasa hispida</i> (Thumb.) Cogn.	Climber	September-October	Cultivated for Fruits
2	<i>Citrullus colocynthis</i> (L.)	Creeper	Almost throughout year	Frequent on sandy soil along river, stream banks, gravelly-rocky
3	<i>Citrullus lanatus</i> (Thumb.) Mast.	Prostrate herb	July-December	Cultivated for Fruits
4	<i>Coccinia grandis</i> (L.) Voigt	Scandent or Prostrate Vines	September-November	Cultivated, Naturalized around Villages
5	<i>Corallocarpus epigaeus</i> (Rottl. & Willd.) Hook.	Climber	August-November	Frequent in hill forest and along river banks

6	<i>Ctenolepis garcinii</i> (Burm.f.) Naud.	Climber	September-December	On hedges
7	<i>Cucumis callosus</i> (Rottl.) Cong.	Prostrate or Trailing herb	August-November	Common weed
8	<i>Cucumis melo</i> L.	Prostrate herb	February-April	Cultivated for Fruits
9	<i>Cucumis prophetarum</i> L.	Hispid climber	August-December	Occasional on hill
10	<i>Cucumis sativus</i> L.	Climber	Almost throughout year	Cultivated for Fruits
11	<i>Cucumis setosus</i> Cogn.	Climbing or Trailing herb	August-October	Rare in forest
12	<i>Cucurbita maxima</i> Duch.	Climbing or Trailing herb	October-November	Cultivated for Fruits
13	<i>Cucurbita moschata</i> (Duch. ex.Lamk) Poir.	Climbing or prostrate herb	September-March	Cultivated for Fruits
14	<i>Cucurbita pepo</i> L.	Climbing or prostrate herb	October-February	Occasionally cultivated
15	<i>Diplocyclos palmatus</i> (L.) Jeffery	Tuberous Vines	August-November	Common in hedges
16	<i>Kedrostis rostrata</i> (Rottl.) Cogn.	Scandent or Trailing herb	September-November	Occasional on hedges
17	<i>Lagenaria siceraria</i> (Molina) Standl.	Large Climber	August-November	Largely Cultivated
18	<i>Luffa acutangula</i> (L.) Roxb.	Climber	July-November	Cultivated for Fruits
19	<i>Luffa cylindrical</i> (L.) Roem.	Climber	Almost throughout year	Cultivated for Fruits
20	<i>Luffa echinata</i> Roxb.	Climber	September-October	Occasional on hedges
21	<i>Momordica balsamina</i> L.	Climber	August-October	Occasional in cultivated field
22	<i>Momordica charantia</i> L.	Climber	August-November	Cultivated for Fruits
23	<i>Momordica dioica</i> Roxb.	Tuberous Climber	August-October	On hill forest
24	<i>Mukia maderaspatana</i> L.	Climber	August-November	Common on hedges
25	<i>Solena amplexicaulis</i> (Lamk.) Gandhi	Climber	July-November	Occasional in hilly forest
26	<i>Trichosanthes cucumerina</i> L.	Climber	August-October	On hedges
27	<i>Trichosanthes tricuspidata</i> Lour.	Climber	August-October	Occasional in the fringes of forest

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