

1. Introduction:

Cucurbitaceae as a whole is a difficult family from standpoint of specific and generic segregation. No one character should be relied upon in the determination of species.

In India, some attempts have been made earlier on this line. Moreover, knowledge of changes in micro-environment of individual or at least a representative is very essential for commercial exploitation. Especially attempts on wild cucurbits like *Momordica dioica*, *Cucumis setosus*, *C. callosus* their cultivation practices and other studies are very scanty.

Cucurbitaceae family brings many difficulties before the workers if reliance is to be put entirely on herbarium specimen. Thus, the present piece of work is planned accordingly.

In the present investigation, work is initiated to conserve and collect the economically useful wild cucurbits, and to bring out potential cucurbits of the district, which will be useful to know the resources similarly, the piece of work will help in accelerating conservation activities.

Almost all the indigenous species are known to have some economic importance or other. It is beyond the scope of this work to provide information of all species. However, a following list may provide reference to more important cucurbits.

A large number of species are grown for vegetables. Either the leaves, flowers and fruits are utilised in daily food. More than 50% of the fruit vegetables belong to cucurbits. Common ones are listed below.

Common cultivated and wild cucurbits.

1	<i>Citrullus fistulosus</i> Stocks Cogn.	Kohala
2	<i>Citrullus lanatus</i> (Thunb.) Matsumura and Nakai.	Kalingad
3	<i>Coccinia grandis</i> (L.) Voigt	Tondli
4	<i>Cucumis melo</i> L. var. <i>agrestis</i> Nand	Shendani
5	<i>Cucumis melo</i> var. <i>momordica</i> (Roxb.).	Phoot
6	<i>Cucumis melo</i> var. <i>utilissimus</i> (Roxb.)	Kakadi, Waluk
7	<i>Cucumis sativus</i> L.	Khira Kakadi
8	<i>Cucurbita maxima</i> (Duch.)	Lal Bhopala
9	<i>Cucurbita moschata</i> (Duch.)	Kashi phal
10	<i>Cucurbita pepo</i> (L.)	Kadu Bhopla
11	<i>Lagenaria siceraria</i> (Molina) Standley	Dudhya Bhopla
12	<i>Luffa acutangula</i> (L.) Roxb.	Dodka
13	<i>Luffa cylindrica</i> (L.) Roem	Ghosala
14	<i>Momordica charantia</i> (L.)	Karla
15	<i>Trichosanthes anguina</i> (L.)	Padwal

Fiber yielding Cucurbits:

<i>Luffa acutangula</i> (L.) Roxb.	Dodka
<i>Luffa capitata</i> (L.) Rome	Ghosala

Two *Luffa*'s have a good potential as fiber yielding species:

According to Bentham and Hooker, it is placed under the sub class Polypetale, the series Calyciflorae the cohort Passiflorae. Engler places it under the subclass Metachlamydae, the order cucurbitales. Hutchinson places it to the order cucurbitales.

The members of this family are distributed mainly in the tropical and subtropical regions with some extending into the temperate parts.

This family is composed of 100 genera and 850 species.

Medicinal plants:

- 1) *Citrullus colocynthis* (L) Schard. (Kadu Indrawan)
- 2) *Melothria heterophylla* (Lour) Cogn.
- 3) *Melothria maderaspatana* (L.) Cogn. (Ghugari)
- 4) *Momordica carantia* L. (Karle)
- 5) *M. dioica* Roxb. ex willd (Kartoli)

Variations is observed in few cucurbits such as

- a) Dimorphic leaves in *Melothria hererophylla*.
- b) Dimorphic flowers - In dioecious as well as monoecious plants of many cucurbits viz. *Cucumis setosus*, *Momordica dioica* the male or female or bisexual flowers are morphologically very different. It is reported by Naik, (1998) that in cucurbitaceae it is the nutrition or edaphic condition together with moisture that control sex of the flowers.

Therefore it is necessary further to test or examine the causes of variations that are met with individual populations. The leaf dimorphism; unless assessed properly, can't be used as a good taxonomic parameter

2. Study Area.

Kolhapur is the southern district of Maharashtra state. It is situated between $15^{\circ} 43'$ & $17^{\circ} 17'$ N latitudes and $73^{\circ} 40'$ & $74^{\circ} 42'$ E longitudes. It is bordered by Sangli district on east and north, Belgum district of Karnataka on east and south and sindhudurga and Ratnagiri on west.

The area of study comprises about 14 localities covering the bordered districts viz. Amba, Bolavi, Chandoli, Dindewadi, Gargoti, Girgaon, Guhagar, Hasur, Katyayani, Morewadi, Panhala, Patgaon, Radhanagari, Ujalaiwadi.

The present piece of work has been undertaken mainly to explore the potential cucurbits of this region for domestication and scientific purpose.