



Survey of the family Agavaceae in Nandurbar District, Maharashtra, India

¹S. S. Pathak* ²Nikhil Tayade and ³S. K. Tayade

^{1,3} Department of Botany, P. S. G. V. P. Mandal's S I Patil Arts, G B Patel Science and S T K V Sangh Commerce College, Shahada Dist. Nandurbar (M.S), 425 409

² College of Agriculture, Dhule, (M.S.) 424 004

ABSTRACT: The present work comprises 14 taxa of the family Agavaceae of Nandurbar District. Of these 5 species belong to the genera *Sansevieria* a dominant genus. Similarly, the genus *Agave*, *Cordyline* and *Dracaena* represented by 2 species each, followed by the genus *Furcraea*, *Polianthes* and *Yucca* represents single species each.

Keywords: Agavaceae, Nandurbar District, Maharashtra, India.

INTRODUCTION: Members of the family Agavaceae are monocots adapted to warm, dry areas. The family composed of 18 genera and over 400 species in the world, many of them native of Western-North America (Lawrence, GHM,1951). The plants often have a rosette of leaves and produce rhizomes. Some, for example the century plant, grow vegetatively for many years, then flower and die. Suckers develop from the dying plant and start the growth cycle over again. Sisal and hemp are grown for fiber and some plants produce a sap from which mescal, tequila and pulque are made.

MATERIAL AND METHODS: The plant materials were procured from various places like Toranmal, Amblibari, Leghapani and Kakarda which are hilly region of Satpuda mountain and Tehsils of Nandurbar districts. The field work carried out in different seasons encompassing every nook and corner of the district in 2022-2024. The data pertaining to botanical name, habit, flowering period and frequency 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 and Karthikeyan, 2000, 2001), Flora of Dhule and Nandurbar Districts (Maharashtra), (Patil, 2003).

SYSTEMATIC ENUMERATION:

1) *Agave americana* L.

Stem short. Leaves erect-patent, glaucous, linear-lanceolate or oblong-lanceolate, concavely indented between the large prickles, prickles pointed downwards or erect, apical spine sharp. Flowers yellowish-green, crowded in large panicles on stout 4-6 in tall scape. Capsules obovoid to clavate.

Common name-Ketki, Vilayati Kumvar

Planted in gardens. Native of Tropical America.

Flowering Period: Irregularly throughout year.

Agave americana* L. var. *marginata

Similar to var. *americana* but is relatively small plant with yellow margin. Planted in gardens.

2) *Agave vera-cruz* Mill.

Stem short, hidden by the thick leaf-bases. Leaves linear-oblong, 1-1.5 cm long, 18-24 cm broad, firm, scarcely constricted above the base, glaucous, margin spinulose, apical spine 1-2 cm long, dark-reddish-brown. Flowers greenish, in gigantic panicle on 2-5 m tall scapes. Capsules oblong-cylindric, tip rounded; seeds black, shining, sometimes turn into bulbils.

A Native of Mexico. Planted in hedges around fields and along roadsides.

Flowering Period: Almost throughout year.

Local Name: Ketki, Kekti.

Uses: Fibers are extracted from the leaves.

Notes: Flowers are usually transformed into bulbils.

3) *Cordyline stricta* Endl.

Shrubs 2 to 3 m tall. Stem slender. Leaves sessile, linear-lanceolate, 30-40 x 23 cm, acuminate, green, marginal line red, often red-purple beneath. Flowers pink, in terminal panicles.

Planted in gardens. Native of Australia.

Flowering Period: August- January

4) *Cordyline terminalis* Kunth, Enum.

Erect shrubs, 2-3 m tall. Leaves distichous, green or reddish-purple, oblong-lanceolate, 30-40 x 5-10 cm, narrowed into a channeled clasping petiole, rather abruptly narrowed at apex to an aristate point. Flowers whitish-reddish, in branched panicles.

Native of E. Himalayas to China.

Planted in gardens, always mistaken for 'Dracaena'.

Flowering Period: Major part of the year.

5) *Dracaena deremensis* Engl.

Large shrubs, 4-5 m tall. Leaves linear-lanceolate, 30-60 x 4-5 cm, undulate, petiole obscure. Flowers red outside, white within, in large axillary or terminal panicles.

Planted in gardens. Native of Tropical America.

Flowering Period: March-June.

6) *Dracaena fragrans* Ker.

Simple or rarely branched, arborescent plants, up to 7 m tall. Leaves crowded at the top and all over the stem-axis, oblong-lanceolate, 30-90

x 5.5-10 cm, narrowed towards base, green or sometimes striped, erect, spreading or recurved.

Planted in gardens for ornamental purposes.

Flowering Period: Not seen.

7) *Furcraea foetida* L.

Shrubs. Leaves 85-140 x 9-14 cm, firm, fibrous, lanceolate, channeled, vivid-green, spinous-serrate in upper half. Scapes gigantic. Flowers creamy-yellow, 3-3.5 x 2.2-2.5 cm, in bracteate panicles.

Native of S. America. Rarely planted.

Flowering Period: Almost throughout the year.

8) *Polianthes tuberosa* L.

Acaulescent herbs. Radical leaves linear-lanceolate, clasping at base, 20-30 cm or more long, gradually smaller upwards, finally passing into bracts. Scapes 60-75 cm tall. Flowers sweet-scented, white, in spike terminating the erect stem.

A native of Mexico. Planted in house-hold gardens.

Common name-Gulchadi, Mexican Tube Rose, Rajnigandha

Flowering Period: July-November.

Local Name: Rajani-gandha, Nishigandha.

Notes: A variety with doubled perianth is also under cultivation.

9) *Sansevieria cylindrica* Boj.

Rhizomatous perennials. Leaves rigid, erect, terete, dark-green, not channeled or transversely banded, up to 90 cm long, +- 3 cm across, glabrous. Flowers creamy or greenish-white, pedicels jointed, in bracteate stout panicle, scape nearly as long as the leaves. Fruit a berry. Native of Belgian Congo. Planted in garden.

Flowering Period: March-August.

10) *Sansevieria stuckyl* Godcf.

It is very similar to *S. cylindrica* Boj.

Planted in gardens. Native of Tropical Africa.

Flowering Period: January-July.

11) *Sansevieria thyrsiflora* Thunb.

A stout, tufted, perennial acaulescent herb. Leaves 45-85 x 3-6 cm, linear-lanceolate or ensiform, thick, coriaceous, light-green, variegated with dark-green transverse bands, flat. Flowers greenish-white, 2-3-fascicled in spicate racemes. Berries dark-green, globose, glabrous.

Native of S. Africa. Planted as an ornamental.

Flowering Period: Usually December-February.

12) *Sansevieria trifasciata* Prain.

Scapigerous, acaulescent, perennial herbs. Leaves linear-oblong, 30-50 x 3-4 cm, erect, entire, acute or obtuse, green with grey wavy cross bars. Flowers white, in fascicles along 30-60 cm tall scape.

Planted in gardens. Native of Belgian Congo.

Flowering Period: March-August.

13) *Sansevieria zeylanica* (L.) Willd.

Scapigerous, perennial herbs. Leaves linear-oblong, 30-45 x 2.5-4 cm, flat but convex on lower surface, clouded with irregular bars or darker green on both surfaces, tip ending in a solid cusp ca 2 cm long, margins yellow. Flowers dull-brownish-white, 2-3 cm long, clustered along the elongate, stout rachis. Fruit a berry.

Planted in gardens. Native of South Africa.

Flowering Period: November-February

14) *Yucca alofolia* L.

Acaulescent or shortly stemmed shrub. Leaves 65-75 x 2-3.8 cm, firm. in rosette, margins whitish, serrulate. Flowers large, cream-coloured, in panicles on central scape, drooping, bell-shaped, perianth polyphyllous.

Common name-Adam's Needle, Spanish Dagger

Planted in gardens. Native of America.

Flowering Period: June-October.

DISCUSSION: In this survey total 14 taxa of the family Agavaceae are collected from Nandurbar District. The genus *Sansevieria* represents by 5 species as a dominant genus. *Sansevieria cylindrical* and *Sansevieria stuckly* are rhizomatus perennial shrub while *Sansevieria thyrsiflora*, *Sansevieria trifasciata* and *Sansevieria zeylanica* are perennial herb. All the species of *Sansevieria* are ornamental and planted in the garden, indoor plant for use as interior foliage and cultivars are grown commercially for fibers. Both the species of the genus *Agave* are wild and cultivated hedge and border plants by the aborigines of Nandurbar District (Pathak, Tayade, Tayade and Pawara,2024; Tayade and Pathak 2023).They are succulent and having antiseptic medicinal use (Aglave,2018). Majority of the taxa are cultivated in garden as ornamental plants and fibers. Leaves both species of *Cordyline* are used in dysentery, skin infection and fever.

Table: I

Sr.No.	Botanical Name	Habit	Flowering Period	Frequency occurrence
1.	<i>Agave americana</i> L.	Herb	Throughout year	Wild, Planted in garden
2.	<i>Agave vera-cruz</i> Mill.	Herb	Throughout year	Wild, Along road sides
3.	<i>Cordyline stricta</i> Endl.	Shrub	August-January	Planted in garden
4.	<i>Cordyline terminalis</i> Kunth, Enum.	Undershrub	Major part of year	Planted in garden
5.	<i>Dracaena deremensis</i> Engl.	Large shrub	March-June	Planted in garden
6.	<i>Dracaena fragrans</i> Ker.	Undershrub	Not seen	Planted in garden
7.	<i>Furcraea foetida</i> L.	Shrub	Throughout year	Rarely planted
8.	<i>Polianthes tuberosa</i> L.	Herb	July-November	House-hold gardens
9.	<i>Sansevieria cylindrica</i> Boj.	Shrub	March-August	Planted in garden
10.	<i>Sansevieria stuckly</i> Godcf.	Shrub	January- July	Planted in garden
11.	<i>Sansevieria thyrsiflora</i> Thunb.	Herb	December-February	Planted in garden
12.	<i>Sansevieria trifasciata</i> Prain.	Herb	March-August	Planted in garden
13.	<i>Sansevieria zeylanica</i> (L.) Willd.	Herb	November-February	Planted in garden
14.	<i>Yucca alofolia</i> L.	Shrub	June-October	Planted in garden

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