



Genus *Capparis* represent in Ahmedabad City, Gujarat, India

KEYWORDS

Genus *Capparis*, Family *Capparidaceae*, Ahmedabad city, Gujarat state.

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ABSTRACT *Ahmedabad is a largest city of Gujarat state situated in Central Gujarat and it is located on Sabarmati river. The herbaceous diversity is highly diversified in vegetation and has rich number of floristic composition due to topography, climate and edaphic factors which are favourable for such luxurious vegetation. Present paper deals with the synoptically analysis of the genus *Capparis* belong to family *Capparidaceae*. It further compares the data with *Flora of Gujarat state* (Shah 1978), *Flora of Ahmedabad* (Vaidya 1967), *Flowering Plants of the Gujarat University campus and surroundings, Ahmedabad* (Pandya 1972).*

Introduction:

Ahmedabad lies between 22°55' 35°36' and 23°07' 51°44' North latitude and 72°28' 41°95' and 72°41' 19°59' East longitudes. It covers 10,000 square kilometer and circumference of the Sardar Patel ring road is 70 kilometer.

Saxton and Sedgwick (1918 and 1922), Sutaria (1958), Gandhi (1958), Vaidya (1967), Pandya (1972), Patel (2010) carried out Floristic study in Ahmedabad. The area has been eroded which might be owing to the proliferation of human activities in these areas. The present paper is there for based on fresh field work carried out during the year 2013 with a few frequent observations in city and vicinity of Ahmedabad city to incorporate data on the genus *Capparis* belongs to family *Capparidaceae*.

Field work

The result made flesh in this work based on collections in these areas. Field work was carried out in all seasons with more frequency during rainy season. Different characters such as, habit, habitat, abundance, color and fragrance of the flower, etc. were noted in the field diary from time to time. The areas explored were divided into smaller sectors, because my emphasis was on intensive rather than extensive explorations. During explorations of different species of genus *Capparis* in different stages of development were collected and identified by dissecting the floral parts and confirmed with the help of Floristic key of Cooke (1908) and Shah (1978).

Artificial keys generated for the identification of Genus *Capparis* and its species of the family *Capparidaceae* with reference of *Flora of Gujarat state* (Shah 1978).

Abbreviations used

In the paper author has used following abbreviations, as

NAP Naileshbhai A. Patel

FBIFlora British India

FGS Flora of Gujarat State

Fls. Flowering Season (Months)

FPB Flora of Presidency of Bombay

Frs. Fruiting Season (Months)

Sp. Species

Syn. Synonymous

Var. Variety

Observation:

***Capparis* Tourn. ex L.**

Key to species

1. Plants leafless, when leaves present minute, caducous, flowers red or scarlet.....*C. decidua*

1. Plants leafy, flowers white, creamy-yellow or with purple tinge:

2. Plants climbing or straggling:

3. Flowers 0.5-0.8 cm across in umbels, berries 0.6-1.2 cm

across.....*C. sepalaria*

3. Flowers 2.5-3.2 cm across, not in umbels, berries

2-2.5cm across.....*C. zeylanica*

2. Plants not climbing or straggling:

4. Leaves membranous, sepals not saccate.....*C. spinosa*

4. Leaves not membranous, inflorescences racemes.....*C. grandis*

***Capparis decidua* (Forsk.) Edgew. (KERDO)**

FGS1:68; FPB 1:49; FBI1:174; NAP:10; Syn. *Capparis aphylla* Roth.

2-5 m tall, straggling shrubs, zigzag and green, terete. Leaves found on young shoots only, small, linear, oblong. Flowers reddish-brown, in many flowered, corymbs from old branches. Pedicels slender 1.0-1.6 cm long. Sepals 4 unequal, hairy, ciliate, lower sepal very saccate, acuminate, inner sepals elliptic, acute. Petals 4, scarlet, unequal, 2 anterior largest, red narrow, oblong. Stamens about 15, filaments red. Ovary ovoid, on a slender, gynophore, fruit globular, glabrous, beaked, red, berry.

Fls&Frs : Feb.-Sep.

Field notes : Common in hedges everywhere.

Capparis grandis L.

FGS1:68; FPB 1:50; FBI1:176; NAP:11; 2.5-5 m tall large shrubs or small trees, often with crooked trunk; bark yellowish-brown, longitudinally fissured. Leaves 2.2-8×2-6 cm, velvety pubescent, at length glabrous, petiolate. Flowers 1.5-2.3 cm across, white, in corymbs. Fruits 1.4-2.5 cm across, globose, rusty-brown, glabrous.

Fls&Frs : Nov.-July.

Field notes : Rare in hedges near Dastane-hayat.

Capparis sepiaria L. (KANTHAR)

FGS1:69; FPB1:51; FBI 1:177; NAP:12; Woody climber, stout; bark brown, rough, longitudinally fissured. Leaves 1.2-4.9 x 0.8-2.2 cm. broadly, ovate, oblong-elliptic or obovate, obtuse, emarginated, stipular, stipules a pair of hooked spines. Flowers white, in dense, sessile or shot, peduncled in axillary and terminal umbels. Pedicels 1.2-1.7 cm. long, filiform. Stamens many. Gynophore 0.6-0.9 cm. long filiform. Fruit globose, glabrous, black, berry, one seeded.

Fls&Frs : Feb.-June, seldom in December.

Field notes : Rare in hedges near Ognaj village.

Capparis spinosa L. (KANTALO, KANTHARO)

FGS 1:69; FPB 1:47; FBI 1:173; NAP:13; Armed, nearly glabrous shrubs. Leaves 1.5-3 cm long, orbicular, ovate or obovate, petiolate. Flowers white, axillary, solitary. Berries 2.5-5 cm long, obovate, veined, red when ripe.

Fls&Frs : Oct.-May

Field notes : Common in hedges everywhere.

Capparis zeylanica L. (GOVINDFAL)

FGS 1:69; FPB 1:51; FBI 1:178

Syn. *C. horrida* L.

A climbing shrub, with hooked spines and reddish, brown tomentum in younger parts. Leaves 2.5-4.5 x 1.8-3.5 cm, ovate, obovate or elliptic-oblong, grey-tomentose beneath, shortly petiolate. Flowers white or creamy, supra-axillary, solitary or 2-3, pedunculate. Fruits ellipsoid or nearly globose, deep-red bright-scarlet, glabrous, smooth.

Fls : Dec.-Mar. **Frs**: Mar.-June.

Field notes : Rare only at Motera village.

Result and Discussion:

During present study 5 species of Capparis has been recorded from Ahmedabad city. While in G.L Shah (1978) recorded 6 species from Gujarat state, Pandya (1972) recorded 2 species from Gujarat University campus and its surrounding and Vaidya B.S. (1967) recorded 4 species of Capparis from Ahmedabad city. Patel N.A. (2010) recorded 4 species of Capparis from Ahmedabad city and its vicinity.

In the present study 1 new species of Capparis was recorded from the study area i.e. *Capparis zeylanica* L. (GOVINDFAL).

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REFERENCE

- Cooke T.H. (1903). The Flora of the Presidency of Bombay Vol. I-II& III, BSI, Calcutta. | Gandhi, H. P. (1958). A list of flowering plants (Angiosperms) of Ahmedabad and its immediate vicinity J. Guj. Univ. 2, 114-156. | Pandya, S.M. (1972). Flowering plants of the Gujarat University campus and its surrounding (Ahmedabad). Vidya Jour. Guj. Uni. XII B, 21-48. | Patel, N.A. (2010). Floristic diversity of the Ahmedabad city, Ph.D. Thesis, Kachchh University, Bhuj | Saxton, W.T. and Sedgwick, L.J. (1918-1922). Plants of Northern Gujarat. 6:209-323, 1918, 9:251-262, 1922. | Shah, G.L. (1978). Flora of Gujarat State Part I & II Sardar Patel University, Vallabh Vidyanagar. 1074. | Sutaria, R.N. (1958). A Text Book of Systemic Botany, Publications, Khadayta Book Depot, Ahmedabad. 1-414. | Vaidya, B.S. (1967). Flora of Ahmedabad Gujarat University, Ahmedabad. |