



Index Copernicus  
IC 5.09

NAAS Rating  
1.3

Received on:  
13<sup>th</sup> March 2013

Accepted on:  
24<sup>th</sup> March 2013

Revised on:  
24<sup>th</sup> May 2013

Published on:  
1<sup>st</sup> June 2013

Volume No.  
Online & Print  
6(2013)

Page No.  
55 to 58

*Life Sciences Leaflets is an international open access print & e journal, peer reviewed, worldwide abstract listed, published every month with ISSN, RND Free-membership, downloads and access.*

## ***CUSCUTA CAMPESTRIS* YUNCK. (CUSCUTACEAE): A NEW SPECIES RECORD FROM GUJARAT STATE, INDIA**

**P.K.PATEL**

**DEPARTMENT OF BOTANY, SPT ARTS & SCIENCE COLLEGE,  
GODHRA, GUJARAT.**

[cyperus.7711@gmail.com](mailto:cyperus.7711@gmail.com)

### **ABSTRACT:**

A new species *Cuscuta campestris* Yunck. Is described and illustrated. It is reported from Chanchelav, Godhra, Panchmahals District, Gujarat State, India. It is new to the Gujarat flora. In this article a photograph, short morphological descriptions are presented.

**KEY WORD:** *Cuscuta campestris*, Chanchelav, Godhra, Panchmahals, New species.

### **INTRODUCTION:**

The genus *Cuscuta* L. (dodder) contains 180 obligatory parasitic species (Yuncker, 1932; Mabberley, 2008), distributed in a wide range of habitats mostly in temperate and subtropical regions of the world. The Genus *Cuscuta* L. is represented by three species in Flora of Gujarat state and three of them *C.chinensis*, *C. hylaina* and *C. reflexa*. There are not recorded *Cuscuta campestris* in Gujarat state.

Extensive survey was undertaken during year 2012-13 at different area of Panchmahals Districts, Gujarat State. During this field survey, I collected plant species which are not recorded in Flora of Gujarat State (G.L.Shah, 1978).

Panchmahals District is situated at 22.30° to 23.23° North Latitude and 73.15° to 74.75° East Longitude in the central part of Gujarat State. While field survey author collected new species *Cuscuta campestris* Yunck. (Cuscutaceae) in Chanchelav, Godhra, Panchmahals District, Gujarat. Chanchelav, Godhra is situated at 23.75° North Latitude and 73.63° East Longitude and 118.11 m

Altitude.

Preliminary identification of the collected specimens was made in the field then further identification using the published literature and floristic works undertaken by [Saxton and Sedgwick](#) (1918), [Sutaria](#) (1941), [Cooke](#) (1958), [Patel](#) (1971), [Shah](#) (1978), [Raghavan et al.](#) (1981) and [Patel](#) (2004).

The brief description with photographs and relevant notes are provided for the easy identification of the taxa in the field. Photographs of plant specimen have been taken in the field. The plant specimen was submitted to Department of Botany, SPT Arts & Science College, Godhra, Gujarat. The voucher specimen no. is PKP00713.

The correct botanical nomenclature, diagnostic character, place of occurrence, distribution, specimens examine etc. of these taxa have been described.

### Scientific name

*Cuscuta campestris* Yunck.

### Synonyms

*Cuscuta arvensis* Beyr. ex Engelm.; *Cuscuta arvensis* var. *calycina* (Engelm.) Engelm.; *Cuscuta pentagona* var. *calycina* Engelm. ; *Cuscuta pentagona* var. *pubescens* (Engelm.) Yunck. ; *Cuscuta pentagona* var. *subulata* Yunck.

### Common names

Golden dodder, field dodder

### Family

Cuscutaceae

### Origin

The native range of this species obscure. It is thought to be native to North America (Canada, USA and Mexico) and parts of the Caribbean. It is possibly also native to parts of South America.

### Naturalized distribution (global)

Locations within which *Cuscuta campestris* has become most commonly naturalized in temperate and subtropical regions and least abundant in the tropics of Central America, Africa, South-East Asia and the Pacific Ocean.

### Place of occurrence

Near Chanchelav village, Godhra, Panchamahals District, Gujarat, INDIA.

### Description

*Cuscuta campestris* is an annual stem parasitic plant that is rather fleshy and smooth. The stems are thin, The stem color is pale yellow to golden yellow or orange, 0.3-0.8 mm in diam., smooth.

Inflorescences lateral, cymose clusters, 4-18-flowered, subsessile, pedicellate, Pedicel ca. 1 mm. flower, 1.2-2 mm in diameter with 0.5mm pedicel. Inflorescence bracts  $0.8 \times 0.5$ mm and ovate.

Flowers are (4–)5-merous, 2.1–4.6(–5) mm long, white, membranous, with pellucid, gland-like laticiferous cells evident in the calyx and less obvious in the corolla, ovary and capsule.

Calyx light green, shorter than the corolla tube, smooth, sepals 5, 1.2× 0.8mm, Calyx cupular, enclosing corolla tube, calyx lobes are ovate-triangular, obtuse broadly ovate, Sub acute, with entire margins, not thickened, erect and fused at the base.

Corolla is white, 2-2.5 mm long. Flowers have 4-5 sepals which are united at base. Corolla tube is campanulate, ca. 1.5–1.9 mm long, corolla lobes are triangular, acute, inflexed at the tip, ca. as long as the tube.

Stamens epipetalous, 5 in number, filament broader at the base, tapering towards the apex, 0.3-0.7mm long, shorter than the corolla; filaments flat 0.2 mm long; anthers 0.5mm ovoid, some what triangular, yellow, bigger than the filaments.

Corolla scales 0.6× 0.4 mm oblong, well developed, entire and convergent over the subglobose ovary, whitish green ovary, superior with diameter 0.5mm, 4-ovuled, ovule 0.2mm in diameter slightly triradiated; styles 2, 1mm long; stigmas reddish-brown capitate. Capsule depressed globose, ca. 3 mm in diam., ca. 2 mm high, with withered corolla at base, irregularly opening.

Mature fruit size 3mm in diameter. The fruit is a light-brown, 2-4-seeded boll. Seeds are oval, light-brown or brownish, to 1.25-2.5 mm long, 1-1.5 mm wide. Immature seed 1mm, yellow green in color.

### **ACKNOWLEDGMENT:**

The author is highly thankful to Mr. Naranbhai Baria for their help during the field trips in the Panchmahal District

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