CUSCUTA VIOLACEUS (CUSCUTACEAE), A NEW SPECIES FROM PAKISTAN

M.T. M. RAJPUT AND SALEHA TAHIR SYEDA

Department of Botany, University of Sind, Jamshoro, Sind, Pakistan.

Abstract

Cuscuta violaceus a new species of the family Cuscutaceae is described from Pakistan.

During a review of the family Cuscutaceae in Pakistan, we examined all the herbarium specimens of genus *Cuscuta* present in Pakistani herbaria and the collection of this genus from Pakistan present in overseas herbaria. Rajput & Syeda (1986) reported 14 species of the genus *Cuscuta* from Pakistan. According to Yuncker's system, (Yuncker, 1932), a new species identified can be placed with the members of Section Monogynella of sub-genus Monogyna.

Cuscuta violaceus. Rajput & Syeda sp. nov. Fig. 1.

Herbae parasiticae scandentes maculae violaceae vel subrosaceae obsitae. Folia membranacea late ovata ad 2.6 mm longa. Sepala crassa sed marginibus membranaceis extus papillata plicis violaceis. Corolla eburnea maculis violaceis ad 6 mm longa subglobescens vel urcealescens ubi fructum maturum squamis laciniatis tubo intus. Antherae basifixa. Ovarium globosum stylo bifido. Capsula conica vel campanulata circumscissilis.

Holotype: Rush Gol, Kamal Akhtar Malik & S. Nazimuddin 1700, 23-8-1981 (KUH).

Parasitic climber covered with violet or pink spots, making a few spirals around the host stem, not interlaced. Leaves membranous, broad ovate, acute, 1.3-2.6 mm long, ca. 1.0 mm wide. Flowers arranged in cymes, sessile or pedicellate; bracts leaf-like. Sepal lobes 5, imbricate, broad ovate, obtuse, membranous at the edges, thick and fleshy in the center, outer surface papillate with violet folds, 2 -2.5 mm long, 1.5 - 2.0 mm wide. Calyx tube ca. 1.0 mm long. Corolla ivory white, with violet spots, 5 - 6.5 mm long. Lobes 5, inflexed, oblong-triangular, 1.5-2.0 mm long, ca. 1.0 mm wide; tube 3.5-5.0 mm long, becoming subglobose to urceolate when the capsule matures. Scales membranous, fringed, half as long as the tube, and 1-1.5 mm long, 1-1.3 mm wide. Stamens epipetalous, sessile; anther basifixed, oblong, 1-1.2 mm long, ca. 0.5 mm wide, with a prominent decurrent line on the corolla tube. Ovary globular, light

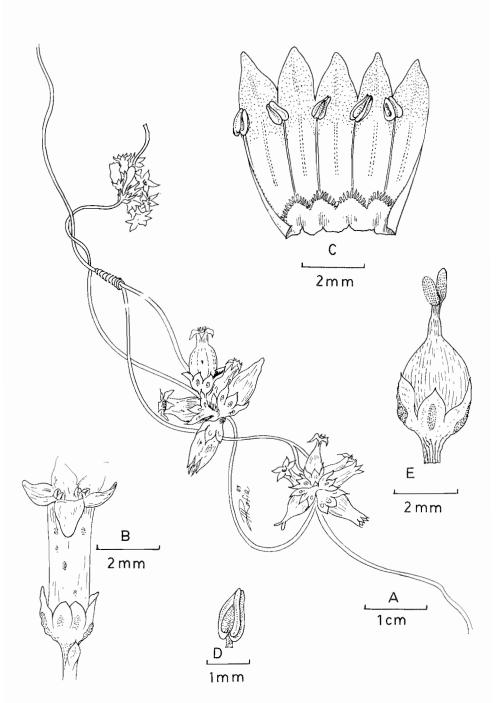


Fig. 1. Cuscuta violaceus A. Habit; B. Flower; C. Opened corolla; D. Anther; E. Carpel with persistant calyx.

yellow below, dark brown above, 1-1.2 mm long, ca. 0.5 mm wide; style subulate, brown to violet, 0.5-0.7 mm long, stigmata 2, V-shaped, deep violet, 0.4-0.5 mm long; ovule 4, papillate, renifrom, 0.5-0.6 mm long, ca. 0.4 mm broad. Fruit a capsule, conical to bell shaped, covered by the thick subglobose to urceolate corolla tube, and surmounted by stamens, style and stigma, circumscissile with a definate line of cleavage and leaving the dissepiment with calyx, 4-4.5 mm long, 5-5.5 mm wide. Seed rhomboid to triangular, with coiled embryo, usually 2 at maturity, papillate, 2.2-2.5 mm long and wide.

Host: Ephedra species

This species differs from all other species of *Cuscuta* in the persistent subglobose to urceolate corolla tube covering the mature capsule. It is known only from the type locality. The specific epithet refers to the violet colour of the pigments present in the species.

Acknowledgements We are thankful to Dr. R.C. Carolin, Professor, School of Biological Sciences, The University of Sydney, Australia, for providing us the latin description, and for the comments on this manuscript. We are also grateful to Professor Dr. S.I. Ali and Dr. Abdul Ghafoor, for the help during the work associated with this contribution. The figures were prepared by Mr. Rafique Ahmed of Botany Department, Karachi University.

We wish to thank the Director/Curators of the following herbaria, for the loan of specimens of *Cuscuta* for this study: A, BM, E, K, KUH, MICH, NYBG, OSLO, PENM, PESH, PH, and RAW.

References

Yuncker, T.G. 1932. The genus Cuscuta. Mem. Torr. Bot. Club., 18: 111-331.

Rajput, M.T.M. and S.T. Syeda 1986. Cuscutaceae Flora of Pakistan Submitted for publication,

(Received for publication 10 November 1985)