

RECENT APPROACHES IN PLANT SCIENCES

Chief-Editor

Dr. Deepak Kumar Srivastava

Principal

Lal Bahadur Shastri Girls College of Management

Lucknow (U.P.), India

Editor

Dr. Subhash Chandra

Senior Assistant Professor

FIST-DST, P.G. Department of Botany

Sri Murli Manohar Town PG College

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Principal

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Aphadi'gn

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Chapter 19

MICROMORPHOLOGICAL STUDIES ON THE GENUS *Kobresia* (CYPERACEAE) IN INDIA

BIKASH JANA^a AND AMBARISH MUKHERJEE^b

^a Department of Botany, Santal Bidroha Sardha Satabarshiki

Mahavidyalaya, Goaltore, West Bengal

^b UGC Centre for Advanced Study (Phase II), Department of Botany,
University of Burdwan, Burdwan, West Bengal, India.

While preparing a systematic account of the genus *Kobresia* Willd. of family Cyperaceae in India, micromorphological features of nuts of its 34 species was studied using both Stereo Zoom microscope and Scanning Electron Microscope (SEM: Hitachi S530) since nuts are hard, durable and capable of preserving their surface pattern useful in taxonomy even in stressful environment prevailing in their habitats stationed in alpine and subalpine biomes. The brief description of the nuts and the surface characteristics of these species thus prepared and tabulated shows considerable polymorphism as well as uniqueness. The surface characteristics being species wise variable were also successfully used in preparing a key to the identification of the concerned species, thus enabling identification of the species in absence of the visible above-ground shoots. Although some botanist combine the genus *Kobresia* with the genus *Carex*, present authors strongly consider these two genera as distinct taxa on grounds of their unique morpho-anatomical characters.

