

COMPREHENSIVE ANATOMICAL ANALYSIS OF ALYSICARPUS GAMBLEI SCHINDL.: AN ENDEMIC SPECIES OF KARNATAKA

SHANTANU Y. CHAVAN¹*, and RUPALI R. TAUR²

¹Dept of Botany, Sant Dnyaneshwar Mahavidyalaya Soegaon, Dist. Chhatrapati Sambhajinagar (MS) India. ²Dept of Biosciences and Technology, MGM University, Chhatrapati Sambhajinagar (MS) India.

*Corresponding author email: alysicarpus@gmail.com

ABSTRACT: Alysicarpus gamblei Schindl., is an endemic species found on the Badami Plateau in Karnataka. This investigation presents a comprehensive study of the morphology, anatomy, dermatology, and vessels of Alysicarpus gamblei Schindl. This study marks the first thorough examination of these aspects for this species. The findings contribute valuable insights into the structural characteristics and biological features of Alysicarpus gamblei Schindl., enhancing our understanding of its uniqueness and ecological significance.

Keywords: Alysicarpus gamblei, Anatomy, Dermatology, Vessels.

Citation: Chavan SY, Taur RR (2024) Comprehensive Anatomical Analysis of Alysicarpus Gamblei

Schindl.: An Endemic Species of Karnataka. Indian J Trop Biodiv 32(2): 171-179.

Received on: 26/11/2024; Accepted on: 31/01/2025

INTRODUCTION

The genus Alysicarpus Necker ex Desvaux (1813: 120) belongs to the subfamily Papilionoideae, tribe Desmodieae of Leguminosae. This genus comprises approximately 34 species and 20 infraspecific taxa, widely distributed across the tropical and subtropical regions of Africa, Asia, and Australia, with the highest diversity found in India (Pedley 2001, Adema 2003, Lewis 2005, Huang and Ohashi 2010, Hassemer et al. 2017, Leeratiwong et al. 2017, Pokle 2017). In India alone, about 17 species and 9 infraspecific taxa of Alysicarpus are present, of which seven species

and eight infraspecific taxa are endemic (Sanjappa 1992, Pokle 2002, Dhabe 2013, Singh et al. 2015, Gholami et al. 2017, Pokle 2017, Chavan 2013).

The first collection of *Alysicarpus gamblei* Schindl. was made by J. S. Gamble in August 1889 from Cuddapah District, Tamil Nadu (specimen number 21223). Initially, Gamble identified the specimen as *Alysicarpus tetragonolobus* Edgew. [Family Leguminosae-Papilionoideae]. Subsequently, Baker re-examined the specimen and identified it as *Alysicarpus bupleurifolius* (L.) DC. var. *gracilis* Baker [Family Leguminosae-