

Leaf Based Phenetic Analysis On The Selected Taxa From The Genus *Ficus* L (Moraceae) From Southern Western Ghats

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ABSTRACT

The present work is a leaf based phenetic study on the selected members of the genus *Ficus* from Southern Western Ghats. Sixteen morphological characters of the leaf considering 102-character states were studied. The species were collected and careful morphological observations were made. The morphological characters were standardised into numerical format with the presence or absence of each character state represented with 1 and 0 respectively. The data was analysed using PAST Ver 2 Software and a dendrogram was obtained. The species were alligned based on the similarities on leaf morphology. The dendrogram obtained showed that the leaf morphology-based clustering is not exactly similar to the current accepted sub generic classification of *Ficus*. But the clustering was almost similar to a habit-based classification of *Ficus* into plants with cauliflorous inflorescence, stranglers, epiphytic & hemi epiphytic trees and independent trees. Thus, it implies that the leaf morphology-based clustering in *Ficus* is similar to its habit pattern.

Key words: *Ficus*, Leaf morphology, Phenetic study.

INTRODUCTION

The genus *Ficus* L. (Moraceae) is one among the most abundant, complex and diverse angiosperms. The hypanthodium inflorescence, minute flowers and morphological complexity make the genera problematic. They are commonly called as 'Fig' plants. About 750 species of *Ficus* is distributed in the world, chiefly in the tropics and sub tropics (Corner, 1965; Berg & Corner, 2005). India has a diversity of 115 taxa of *Ficus*, majority of them distributed in the North Eastern regions (Chaudhary *et al.*, 2012). Around 40 species of *Ficus* have been reported from the Western Ghats region. According to the current classification, the genus is divided into six subgenera based on overall morphological and sexual features (Berg, 2003).