PREFACE

The family Compositae (Asteraceae), the largest among the dicotyledonous families, constitutes a well-knit group of mostly herbs enjoying a cosmopolitan distribution. Heliantheae is one of the largest tribes of the Compositae and is regarded by many systematists as the most primitive of the traditionally recognised 13 tribes of the family. These distinctions place the Heliantheae in an important position with regard to understanding the systematics of the Compositae. Although Bentham’s classification of the family has been accepted as a comprehensive system, some modification to this, especially as regards phyletic relationships of various tribes have been proposed by more recent systematists.

The tribe is richly represented in the tropical South India; but the available data on different aspects from the region is very scanty and scattered. Thus, the present work has an added significance, with regard to the stomatal features, leaf architecture, variations in vessel elements, palynology and achene morphology of 40 taxa belonging to 26 genera of the tribe. In addition to that a numerical approach is attempted for the classification of the tribe based on the included parameters for the study.

The observations and discussions are summarised under 2 sections as given below.
Section I

The observations on various aspects such as stomatal features, leaf architecture, palisade ratio, foliar histochemistry, vessel elements, palynology and achene morphology are described under separate heads. The observations are followed by figures, photomicrographic illustrations and tables.

Section II

The results of the observations were discussed separately.

A general discussion is made on the systematics of the tribe. The data obtained from different parameters was analysed numerically.