After the publication of the catalogue of the lace bugs of the world by Drake and Ruhoff (1965), enthusiastic search has been set in motion in different parts of the world by Tingidologists to add further to the list. The visible morphological features of the adult bugs alone have been considered for taxonomical purposes and the nymphal instars that exhibit wide range of morphological variations from species to species have been all the time kept as mere objects of academic interest. Consequently, the problem of interrelationship and phylogeny of this group of insects has been subjected to often inconclusive discussions and its higher taxonomy periodically revised.

Structural variations in the process of evolution are a continuous process and the variations involve gradual appearance of new structures or more often modifications, multiplication, regression or even loss of certain more important preexisting structures. Evolution in its course need not affect all the morphological features and for that reason certain structures may remain as relicts to give clue towards advancing our interpretations and for tracing the various steps. The Tingidae are now included under Cimicomorph - Geocorisae on the basis of certain
characters common with Mirids and Reduviids, and on the assumption that phytophagy originated secondarily in this group during the course of evolution. Tingidae are entirely phytosuccivorous and any character pertaining to a predatory habit being retained will betray its ancestry either with the Mirids or with the Reduviids and will pave the way for tracing it further in definitive lines. A more thorough study of the various structures in a large number of species of tingids in a predominant scrub jungle ecosystem in Southern India therefore has been found expedient to pursue.

An intensive survey of the various tingid species in Southern India was made during a period of three years. For a more meaningful discourse on the biosystematics of the various species found in this region, the general morphology including the pattern of development of hemelytral architecture and the male and female genitalia of the adults and the physiognomic features of the cuticular and body outgrowths of the nymphal instars have been studied in greater detail. Twenty species have been described new to science. An attempt to provide more informations on the evolutionary trend in Tingidae has been made. It is hoped that the more basic informations provided in the dissertation will improve our insight into biosystematics of the family in the context of a rapidly changing ecosystem.