

Distribution of *Bactrocera* Macquart (Diptera:Tephritidae) in Kerala with Special Reference to the Western Ghats

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ABSTRACT

Fruit flies (Tephritidae) are one among the major threat to Horticulture Industry. Among the several species, most pestiferous ones come under the genus *Bactrocera* Macquart, of which the majority are attracted to the lures. An attempt was made to understand the spatial distribution of the economically important fruit flies in Kerala using Global Positioning System (GPS). Fourteen species under the genus *Bactrocera* were encountered during the study and their distribution patterns are presented. Only four species show wide distribution, namely *Bactrocera dorsalis*, *B. caryeae*, *B. cucurbitae* and *B. tau*, which are known to infest an array of fruits and vegetables. Five species *B. caudata*, *B. nigrotibialis*, *B. scutellaria*, *B. trilineata* and *B. tau*, are new records for Kerala.

Key words: *Bactrocera*, Tephritidae, Diptera, Kerala, Western ghats.

INTRODUCTION

Understanding the spatial distribution of biological diversity is the foremost prerequisite for meaningful conservation of any natural ecosystem. The construction of biodiversity maps reflecting the spatial distribution would serve several purposes such as locating the hot spots of biodiversity, assigning conservation values for different areas, giving information on the structure and dynamics of the vegetation and eventually formulating strategies for sustainable utilisation of the resources. In India among insects, root grubs and ants were mapped for their diversity (Ali & Ganeshaiah, 1998). The Western Ghats, also known as the Sahyadri Hills, are well known for their rich and unique assemblage of flora and fauna. Myers *et al.* (2000) included the Western Ghats amongst the 25 biodiversity hot spots identified in the world. Concerted efforts