



Thysanoptera of Southeastern U.S.A.: A checklist for Florida and Georgia

STAN DIFFIE¹, G. B. EDWARDS² & LAURENCE A. MOUND³

¹Department of Entomology, University of Georgia, 122 S. Entomology Dr., Tifton, GA 31793. E-mail: diffie@uga.edu

²Florida State Collection of Arthropods, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, P.O. Box 147100, Gainesville, FL 32614-7100. E-mail: edwardg@doacs.state.fl.us

³CSIRO, GPO Box 1700, Canberra, ACT 2601, Australia. E-mail: laurence.mound@csiro.au

Abstract

A list is presented of 275 species of the Order Thysanoptera known from Florida and 202 species from Georgia; only 122 of these species are from both states. The list was compiled from museum collections, literature reviews, and records of recent introductions. More than 60 exotic species are from the Caribbean basin, with a few recently introduced species from the Oriental region. The lack of available North American faunal information concerning thrips is emphasized (this being derived from haphazard collecting and in only a few areas), as well as the lack of reliable literature for identifying native North American Thysanoptera.

Key words: Thysanoptera, Southeastern, U.S.A., checklist

Introduction

Biodiversity and conservation work along with studies on invasive species are dependent on a knowledge of the organisms that comprise a fauna in any given area. In this regard, it is sobering that the last complete published listing of species of North American Thysanoptera was 100 years ago (Moulton 1911). That list included 118 species, whereas Arnett (1985) estimated that the thrips fauna of the American continent north of Mexico to be comprised of about 700 described species with a further 25% of this figure remaining undescribed or undiscovered. Since 1911, the only large scale accounts of the North American thrips fauna have been keys to the genera and lists of species in the suborder Tubulifera (Stannard, 1957), and a comprehensive account of the Thysanoptera of Illinois (Stannard, 1968). The list presented here was developed largely in response to a recent listing of the thrips of California (Hoddle et al., 2004). Our objective here is to facilitate East/West faunal comparisons, and to provide a modern baseline against which invasion by foreign species can be monitored in this part of the USA where agriculture and horticulture are particularly vulnerable to incursions due to a permissive year round climate.

The past 40 years have seen major changes in the taxonomy and systematics of Thysanoptera, resulting from an appreciation of the structural variation in many species (Mound, 2005), together with a greater understanding of systematic and phylogenetic relationships. The list presented here follows the nomenclature in the web-based world checklist of 5800 species (Mound, 2008). The Californian list used a similar format, and has stimulated the production of a taxonomic account of the thrips fauna of that State (Hoddle et al. 2008). It is hoped that the present list will similarly stimulate production of an account of the southeastern thrips fauna of the USA.

There are two essential problems with evaluating differences in the thrips fauna across different parts of North America. First, most thrips have been collected haphazardly, rather than during targeted faunal surveys