



## Heinrich Uzel, the father of Thysanoptera studies

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### Abstract

Jindřich (Heinrich) Uzel, a Czech phytopathologist and entomologist, published in 1895 a monograph on the Order Thysanoptera that provided the basis for almost all subsequent work on this group of insects. Here we review all the papers and books on thrips that were published by Uzel, including relevant phytosanitary reports. A list is provided of 91 species-group taxa described in the 1895 monograph, together with their current status.

**Key words:** Uzel, Thysanoptera, thrips

### Introduction

The first known publication that recorded the existence of thrips appeared in the late 17th century. Filippo Bonanni, a Roman Catholic priest, published in 1691 sketches of an insect that was subsequently recognised by Uzel (1895) as a male of *Anthothrips staites*. However, Baron Carl De Geer (1744), of the 18th century Swedish royal court, is usually credited with the first record of insect species (*Physapus fuscus* and *P. ater*) that belong to the subsequently named Order Thysanoptera. Two years later Linnaeus (1746) used Thrips (in Greek θρίψ) as the group name for these insects, and he placed this genus at the end of the Hemiptera with three species numbered 726–728 (1746: 220–221). In addition to the two re-named species attributed to De Geer, he described a third species as *Thrips elytris albis nigrisque fasciis, corpore atro*, this being before the accepted date for the institution of binomial nomenclature in 1758. The Irish entomologist, Alexander Henry Haliday (1836) first proposed the ordinal name Thysanoptera in the first detailed publication about these insects. He included morphology and biology together with a survey of 41 known species in 11 genera. Following the summary published by Walker (1852), a series of smaller contributions on thrips anatomy, development and systematics were published by authors in several countries (e.g. Heeger 1852, Fitch 1855, Lindeman 1887).

Notwithstanding these smaller contributions, the first monograph dealing exclusively with this insect order was issued in 1895 by the Czech entomologist Jindřich (Heinrich) Uzel. This 500 page book not only summarized comprehensively almost all previously published information on Thysanoptera, but described 11 new genera, 63 species and 25 varieties, together with identification keys and illustrations. This remarkable, seminal, work provided the basis for a subsequent explosion in information about thrips in the early part of the 20<sup>th</sup> century. The volume by Uzel measured 34 x 27 x 4.5 cm, and weighed 3 kg. Despite these dimensions, the British thrips workers Richard Bagnall and Guy Morison used to carry this folio volume on their bicycles during thrips field studies in the early 1900's (teste Guy Morison to Laurence Mound in 1965). Not until Priesner (1926–1928) was any alternative text available for recognising Thysanoptera taxa.

In this paper we review all papers and books published by Uzel that include information on thrips, including many phytosanitary reports. Some of these are no longer available in their printed version, only as