University of Zabol
Graduate school
Faculty of Agriculture

The Thesis Submitted for the Degree of Master of Science.
(In the Field of Entomology)

Title:

A Faunistic Survey of Thysanoptera cereal Association With determination of Dominant Species In Northern khorasan, Iran.

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Abstract:

The farms of wheat and barley in Bojnourd (Khorasan-e-shomali province) were sampled during two crop seasons to determine the occurrence, frequency and distribution of thrips species. In order to establish the occurrence and ratio of thysanoptera species associated with cultivated wheat and barley, a total of thirty five farms of wheat and twenty three farms of barely were randomly sampled in different areas of Bojnourd during April to July 2008-2010 from the beginning of the vegetation period until harvesting. Two general techniques were used to collect thrips; Thysanoptera species occurring on stage before start of shooting were directly collected from the leaves, sheaths and spikes was used for subsequent stage. Thrips were immediately removed from the tray surface by means of a moistened No.000 camel's hair brush, and placed in to AGA solution. The number of each thrips species was converted to a percentage of the total collected thrips in wheat and barely for two crop years. Among 27 recognized species of thrips, *Haplothrips tritici* Kurd. was the dominant species accounting for 30.4% and 42.4% in wheat and barley respectively. *Aeolothrips intermedius* Bag. was the second most abundant species comprising 14.5% in wheat and *Sitothrips arabicus* Pri. with abundant species comprising 27.8% in barley farms. Although *Haplothrips tritici* is a wide-spread species in Bojnourd, but it population is not the same in all areas.Thysanoptera external morphology and key for idification were provide. The main diagnostic characteristics such as, host range, geographical flore in Province of Northern Khorasan comparison with other region of the country also to different other countries has been discussed. 16 genus and 27 species of Thysanoptera from cereal was collected in areas under study, which include 7 new records were for North khorasan Province.

Key words: Funa, Thysanoptera, Northern Khorasan, Dominant Species, Iran.