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SOME RECORDS OF TABANIDAE (DIPTERA) IN TURKEY

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This report is based on the tabanid flies collected from Konya, Eskişehir, Adana and Hakkâri during the summer of the years, 1960 - 1963. The specimens were identified by Dr. Cornelius B. Philip and Dr. H. Oldroyd.

As far as we know, there is not much information on the tabanid fauna in the Middle East and little is known of the species in Turkey. There is no doubt that, tabanid flies are densely populated and cause harmful effects on livestock as a blood sucker and transmitter of the causative agents of several diseases in the country. Several authors have given their attention to this subject. Heretofore one species has been reported from Erzincan (9) and 9 species from Malatya, Elazığ, and Diyarbakır (3). It has been claimed that 2 out of 10 species have been found to be common in Turkey (5).

Material and Method

A total of 452 specimens of tabanid flies were examined to determine their species. The flies were attracted to a live horse used as a bait on pasture and were trapped by means of a prepared cyanide bottle when they started to feed on blood. The dead flies taken from the killing bottle were freshly mounted on pins by direct pinning and brought to the laboratory for identification.

Results

As it is shown in the table, 452 representatives of tabanid flies collected from Konya, Eskişehir, Adana and Hakkâri were grouped into 5 genera, 20 species and a variation of another species. Of these specimens, 200 were from Konya and identified as *Tabanus arabicus* Macq., *T. spectabilis* Lw., *T. leleani*

The authors wish to extend their appreciation to Dr. Oldroyd and Dr. Philip for the identification of the specimen.

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var. pallidus Ols., *Atylotus agricola* Wied. Many, *A. agrestis* Wied. Many, *A. plebejus* Fall., *Haematopota pallens* Lw. and *Chrisops punctifer* Lw. Among these species *Tabanus spectabilis* (15 %), *T. arabicus* (10 %) and the species of *Atylotus* genus (17.50 to 22.50 %) were found to be densely populated. A number of specimens, 137, which came from Eskişehir consisted of *Tabanus automnalis* L., *T. bromius* L., *T. mixtus* Szilady, *Atylotus pulchellus* Meigen, *A. rusticus* L., *Haematopota italica* Meigen, and *Chrisops flavipes* Lw. In this area the density of *Tabanus automnalis* was found to be very high (65.69 %). A study of 99 tabanid flies collected from Adana resulted in the discovery of *Efflatounanus umbrinus* Meigen, *Atylotus pulchellus* Lw. and *Chrisops flavipes* Lw. Most of the specimens represented *Efflatounanus umbrinus* (48.88%) and *Atylotus pulchellus* (38.59 %). A total of 16 tabanids from Hakkâri were grouped into *Tabanus* genus and identified as *Tabanus bromius* L., *T. caucasi* Szilady, *T. graecus* Meigen, *T. distinguendus* Verrall, *T. eggeri* Schiner, and *T. lunatus* Fabr. The most common species in this locality was *Tabanus distinguendus* (35.5 %).

**The species of tabanid flies and their distribution in Konya,
Eskişehir, Adana and Hakkâri**

Number of flies collected and their locations

Species of tabanid flies	Konya	Eskişehir	Adana	Hakkâri
	200	137	9	16
<i>Tabanus arabicus</i> Macq.	10 %	-	-	-
<i>T. automnalis</i> L.	-	65.69%	-	-
<i>T. bromius</i> L.	-	0.36%	-	18.75%
<i>T. caucasi</i> Szilady	-	-	-	0.62%
<i>T. distinguendus</i> Verrall	-	-	-	35.5%
<i>T. eggeri</i> Schiner	-	-	-	18.75%
<i>T. graecus</i> Meigen	-	-	-	0.62%
<i>T. leleani</i> var. <i>pallidus</i> Ols	0.5%	-	-	-
<i>T. lunatus</i> Fabr.	-	-	-	12.5%
<i>T. mixtus</i> Szilady	-	0.45%	-	-
<i>T. spectabilis</i> Lw.	15%	-	-	-
<i>Efflatounanus umbrinus</i> M.	-	-	48.88%	-
<i>Atylotus agrestis</i> W M	20%	-	-	-
<i>A. agricola</i> W. M.	22.50%	-	-	-
<i>A. plebejus</i> Fall.	17.50%	-	-	-
<i>A. pulchellus</i> M.	-	0.51%	38.59%	-
<i>A. rusticus</i> L.	-	0.65%	-	-
<i>Haematopota italica</i> M.	-	0.87%	-	-
<i>H. pallens</i> Lw.	0.75	-	-	-
<i>Chrisops flavipes</i> Lw.	-	0.36	12.12%	-
<i>Ch. punctifer</i> Lw.	0.25	-	-	-

Discussion and conclusion

Chrisops flavipes Lw. discovered in Eskişehir and Adana is also recorded in Erzincan and Malatya (9, 3), but no available data concerning *Chrisops punctifer* which was found in Konya is present. It appears that *Tabanus automnalis* L. and *Tabanus bromius* L. are widely distributed in the Middle East and European countries. They are found in Iran, Switzerland and Italy (6, 2, 8). The presence of these species in Turkey was reported as having been found (3, 5) in the Eastern part of Turkey (Malatya, Elazığ and Diyarbakır). They were present in our collections from Eskişehir and Hakkâri. An investigation showed the presence of *Haematopota italica* M. and *Haematopota pallens* Lw. in Malatya, Diyarbakır and Elazığ (3). The existence of the first species in Switzerland is also reported (2). We encountered *Haematopota italica* M. in Eskişehir, and *Haematopota pallens* Lw. in Konya. The representatives of *T. distinguendus* Ver., *T. tergestinus* Egger, *Atylotus plebejus* Fall., *A. rusticus* L. and *A. agrestis* W. M. are noted from Switzerland (2); Those of *Tabanus eggeri* Schiner, *T. tergestinus* Egger, *Atylotus pulchellus* M., *A. agricola* W. M. from Italy (8). The occurrence of *Tabanus leleani* Austen in Iran is predicted by Philip (6). He also pointed out the existence of *Tabanus lunatus* Fabr., *Efflatounanus umbrinus* M., *Atylotus plebejus* Fall., *A. agrestis* W. M., *A. pulchellus* M. in Egypt (6, 7). These data on the presence of *T. eggeri* Schiner, *T. leleani* var. *pallidus* Ols., *T. lunatus* Fabr., *T. spectabilis* Lw., *T. mixtus* Szilady, *Efflatounanus umbrinus* M., *T. arabicus* Macq., *T. caucasi* Szilady, *T. graecus* Meigen, *T. distinguendus* Verrall, *Atylotus agrestis* W. M., *A. agricola* W. M., *A. plebejus* Fall., *A. pulchellus* M., *A. rusticus* L. in Turkey have been given for the first time in this report. In our collections we have not seen any specimens representing *Tabanus roussellii* Marq., *T. automnalis* var. *brunnescens* Szilady, *Nomorius vitripennis* Meigen, and *Tabanus bovinus* Linn. which were recorded previously by Mimioğlu (3) in the Eastern part of Turkey.

Summary

During the summer of the years of 1960 and 1963, a total of 452 specimens of tabanid flies were collected from Konya, Eskişehir, Adana and Hakkâri (Turkey). They were grouped into 5 genus, 20 species and 1 variation. They are identified as following *Tabanus arabicus* Macq., *T. automnalis* L., *T. bromius* L., *T. caucasi* Szilady, *T. distinguendus* Ver., *T. eggeri* Schiner, *T. graecus* Meigen, *T. leleani* var. *pallidus* Ols., *T. lunatus* Fabr., *T. mixtus* Szilady, *T. spectabilis* Lw., *Efflatounanus umbrinus* M., *Atylotus agrestis* W. M., *A. plebejus* Fall., *A. pulchellus* M., *A. rusticus* L., *Haematopota italica* M., *H. pallens* Lw., *Chrisops flavipes* Lw., *Ch. punctifer* Lw. Eight out of these species were found in Konya, seven of them in Eskişehir, three in Adana, and six in Hakkâri.

Ö z e t

1960 ve 1964 yaz aylarında Konya, Eskişehir, Adana ve Hakkâri havâlisinden 452 adet tabanus sineği toplanmıştır. Bunlar 5 soy, 20 tür ve 1 varyasyon içinde toplanarak aşağıdaki şekilde teşhis edilmişlerdir: *Tabanus arabicus* Macq., *T. autumnalis* L., *T. bromius* L., *T. caucasi* Szilady, *T. distinguendus* Ver., *T. eggeri* Schiner, *T. graecus* Meigen, *T. leleani* var. *pallidus* Ols., *T. lunatus* T. *mixtus* Szilady, *T. spectabilis* Lw. *Efflatounanus umbrinus* M., *Atylotus agrestis* W. M., *A. agricola* W. M., *A. plebejus* Fall., *A. pulchellus* M., *A. rusticus* L., *Haematopota italica* M., *H. pallens* Lw., *Chrisops flavipes* Lw., *Chrisops punctifer* Lw. Bu türlerden 8 tanesine Konya'da, 7 sine Eskişehir'de 3 üne Adana'da ve 6 sına da Hakkâri'de rastlanmıştır.

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