

TABANIDAE (DIPTERA) OF IRAN

I. A REVIEW OF LITERATURE (x¹)

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The extremely different geographical character and climate conditions of Iran with her poorly known, but expectively interesting fauna opens consequently the zoologist a broad field of activities. A wide range of still undiscovered factors is awaiting the entomologist, in particular. At the present the Division of Entomology of Institute of Parasitology and Malariology is working on the Iranian fauna in general and on taxonomy of several groups of insects of medical importance, in particular.

In this and the coming notes it will be dealt with the family Tabanidae, commonly known as horseflies (in Persian: khar-magas). In spite of their great veterinary and medical importance as mechanical transmitters of several parasitic and bacterial (and perhaps viral) diseases (1952 Rafyi reported "Surra" disease, *Trypanosoma evansi* Steel, as occurring on camels and equines in Iran), the Iranian representatives of tabanid flies have received little attention in the past.

There are several scattered contributions in the literature to the knowledge of Iranian Tabanidae: 41 species have been hitherto recorded

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and reported as occurring in Iran by different authors, as shown in the following list.

(A=Austen, 1919-1924, B=Becker 1912/13, K=Kröber 1938, L=Leclercq, 1957, O=Olsufiev 1937, R=Ricardo 1911. + = type material origins from Iran.)

species	authorities
1. <i>P. (C.) tigris</i> Big. ...+.....	K,O
2. <i>S. irritans</i> Ric.+.....	A,B (as <i>unicolor</i> Beck.), K
3. <i>N. vitripennis</i> Meig.	O
4. <i>Ch. (H.) flavipes punctifer</i> Lw. B (as <i>maculiventris</i> Beck.),	K,O
5. <i>Ch. (H.) italicus</i> Meig.	O
6. <i>Ch. (H.) mlokosiewiczi</i> Big.	K,O
7. <i>Haem. obscurata</i> Big.	K
8. <i>Haem. pallens</i> Lw.	O
9. <i>Hyb. acuminatus</i> Lw.	K,O
10. <i>Hyb. morgani</i> Surc.=? <i>arpadi</i> Szil. apud Krober	K
11. <i>At. agrestis</i> Wied.	K,R (as <i>adjacens</i> Ric., as <i>ditaeniatu</i> <i>Macq.</i>)
12. <i>At basicallus</i> Szil. ...+.....	K
13. <i>At. lacteipennis</i> Beck.	K
14. <i>At. pulchellus</i> Lw.	A,K,O,R (as <i>cyprianus</i> Ric.)
15. <i>At. quadrifarius</i> Lw...+.....	R (see note A)
16. <i>Ther. abazus</i> Big. ?	K,O (as <i>rupium</i> Brau.), R
17. <i>Ther. bifarius</i> Lw.	O
18. <i>Ther. carabaghensis</i> Ports. ...	O
19. <i>Ther. erberi</i> Brau.	O
20. <i>Ther. quatuornotatus</i> Meig.	O
21. <i>Tab. accipiter</i> Szil.	O
22. <i>Tab. albifacies</i> Lw.	A,B (as <i>albidifacies</i> Lw.) K, (see note B)
23. <i>Tab. apricus</i> Meig.	O
24. <i>Tab. autumnalis brunnescens</i> Szil.	L,O
25. <i>Tab. bovinus</i> L.	K

26.	Tab. bromius L.	K,L,O
—	Tab. bromius flavofemoratus	
	Str.	O
27.	Tab. canipalpis Big. +	K,R
28.	Tab. christophi Kr. +	K
29.	Tab. glaber Big.	K,R
30.	Tab. intermedius Egg.	K,L,O ?, R (as <i>eggeri</i> Schin.)
31.	Tab. laetitinctus Beck. ... +	A,B,K,O
32.	Tab. leleani Aust.	O
33.	Tab. miki Brau.	K
34.	Tab. polygonus Walk.	K
35.	Tab. pulverifer Walk.	A,K,R (as <i>persis</i> Ric.)
36.	Tab. regularis Jaen.	A,B,K,O
37.	Tab. sabuletorum Lw. ... +	K,O,R
38.	Tab. spectabilis Lw.	K,O,R
39.	Tab. sudeticus Zell.	K
40.	Tab. unifasciatus Lw.	O
41.	Tab. zimini Ols.	K,O

Note A) Ricardo (1911, p. 254) quoted the provenance of the typical *Atylotus quadrifarius* Lw., 1874 and *Tabanus sabuletorum* Lw., 1874 as "Schahrud, Turkestan". On the other hand Olsufiev (1937, p. 256 and 409) stated, that the type material of *T. sabuletorum* Lw. origins from "Schachrud (Iran)". It is therefore likely that the type of *At. quadrifarius* Lw. was found in Shahrud, Iran. We could find a locality named Shahrud (Schahrud, Schachrud resp.) being situated in Turkestan (U.R. S.S.) neither in the "Great Soviet Encyclopaedia" nor in any available maps. Due to the fact that presently in Iran 5 localities are named Shahrud they are listed herewith:

- 1) one village in Azerbaijan (Ostan 4, N.W. Iran)
- 2) one village in Khuzistan (Ostan 6, S.W. Iran)
- 3) one village in Balutshistan, Persian Gulf district (Ostan 8, S.E. Iran)
- 4) one village in Khorassan, district of Torbate-heidarieh (Ostan 9, N. W. Iran)

5) one city in Ostan 2 (formerly included into Khorassan, N.W. Iran). Nb. 1-3 cannot be taken in consideration as the specified provinces (Ostans) are not in the neighbourhood of the region of Turkestan (X). Nb. 4 can, although situated next to Turkestan, not be considered, being a very small village and only to reach by means of a track. Nb.5 is the well known city Shahrud, situated on the old caravan road Tehran-Meshed (the present motor road) and most likely the "Shahrud" quoted by Ricardo and Olsufiev as more as in the last century this city could most probably considered to be lying within the limit of Turkestan. *Atylotus quadrifarius* is therefore included in the above list.

Note B) It is doubtful, if there has been up to now a record of *Tabanus albifacies* Lw. from Iran. The only recorded specimens of this species from Iran seem to be those, which are identified and reported by Becker (1912/13). But Olsufiev wrote, (1937, p. 253 and 408), that in the collection of the Zool. Inst. Acad. Sci., Leningrad, there are 1 M.* and 2 FF. from Iran, labelled by Becker as *T. albifacies* Lw., which are in reality *T. accipiter* Szil. and further 3 MM. with the same identification belong to a species near *T. leleani* Aust., the FF. of this species being identified as *T. sabuletorum* Lw. by Becker.

The present writer has not seen Becker's publication "Persische Dipteren" 1912/13, and does not know, how many specimens of *T. albifacies* from Iran are actually identified and reported by the latter author, and if there are any other records of this species from Iran. But at least it is clear, that 1 M. and 2 FF. of Becker's specimens are *T. accipiter* and other 3 MM. (provenance? Iran) are also misidentified, thus Becker could not have known this species well.

Note C) *At. niveipalpis* Big. is deleted from the list due to its doubtful validity and uncertain provenance: ? Persia apud Ricardo 1911; ? Caucasus, ? Persia apud Kröber 1925.

Note D) *Tabanus Polyzonatus* Big., recorded from Iran by Bigot is

★ F. = Female and M. = Male.

(X) The definition of Turkestan given in the Encyclopaedia Britannica 1957 is as follows: "Turkestan: a name that has been conventionally employed to designate the regions of Central Asia between Siberia on the north and Tibet, India and Afghanistan on the south, the western limit being the Caspian Sea and the eastern limit Mongolia and the Gobi desert".

considered a synonym of ? *T. mixtus* Szil. by Kröber 1925, of *T. intermedius* Egg. by the same author 1938.

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