

RESULTS OF CZECHOSLOVAK-IRANIAN ENTOMOLOGICAL EXPEDITIONS TO IRAN

Diptera: Culicidae, Oestridae

JAN MINÁŘ

Institute of Parasitology, Czechoslovak Academy of Sciences, Praha

Mosquitoes and bot-flies were collected by a Czechoslovak expedition of the Department of Entomology of the National Museum, Prague, in Iran in 1973.

CULICIADE

Culiseta annulata (Schrank, 1776)

3 ♀♀ — North Iran, Robat-e-Tork, June 24.—25., 1973 (loc. No. 258).

Aedes caspius (Pallas, 1771)

42 ♀♀ — East Iran, Kahurak, March 25—26, 1973 (loc. No. 135).
Mosquitoes from this material have typical specific characters.

Culex theileri Theobald, 1903

20 ♀♀ — North Iran, Robat-e-Tork, June 24—25, 1973 (loc. No. 258).

OESTRIDAE

Oestrus ovis Linné, 1758

1 ♀ South Iran, Banu-e-Charehar, Sowghan, May 8, 1973, 1800—2000 m. (28,20 N; 57.00 E) (loc. No. 191).

The locality is situated in the province Kermán, southerly of the Jebal Barez Mountains. It is a semi-desert covered with saxauls and *Peganum harmala*, where goats, sheep and donkeys were largely reared. A bot-fly flied on a member of the expedition at 7 a. m. at the temperature 35 °C and deposited 1st-stage larvae into his eye. An oculist in Bandar Abbas removed 16 larvae from the eye.

Discussion. These findings complement the present partial information on the occurrence and distribution of mosquitoes in this region, which forms the boundary between the palaeartic and oriental zoogeographic regions (Gutsevich 1943, Minář 1974). The species collected have a wide area of distribution. *Cul. annulata* and *Ae. caspius* are very abundant in the warmer part of the palaeartic region, *C. theileri* occurs also in the Ethiopian and oriental regions (Stone et al. 1959, Gutsevich et al. 1970 and others).

Ae. caspius is a dominant species in the steppe and semi-desert zone of Middle Asia. The finding of specimens with characteristic features in East Iran supports the opinion that this typical form occurs in the whole region of Middle Asia up to West Mongolia (Minář, 1976).

From the ecological view, all mentioned species have more generations during the vegetation period. *Ae. caspius* is adapted to a hot, dry weather also by its ability to deposit eggs not only on a moist ground, like other species of the genus *Aedes*, but also into water reservoirs, similarly as the species of the genera *Culex* and *Culiseta*. It is of great medical importance, due to its mass occurrence and possible transmission of causative agents of some diseases in the region investigated (Gutsevich et al. 1970 and others).

The species *C. theileri* is a vector of Rift Valley Fever virus in North Africa (Smith et al. 1973).

Cases of eye myiasis in man, caused by 1st-stage larvae of *Oe. ovis*, have been reported from the regions with intensive sheep breeding, especially in North Africa and Central Asia (Porčinskij 1913, James 1947, Grunin 1957 and others). The larvae cause acute conjunctivitis lasting several days, but they do not continue to develop and the disease has no after-effects in contrast to other myiasis of man. In the above case the infestation of man was probably caused by the lack of natural hosts, sheep, in the given semi-desert locality.

Summary

The material collected by the Czechoslovak-Iranian entomological expedition in Iran in 1973 comprised 3 species of mosquitoes belonging to 3 genera: *Culiseta annulata* (Schrank), *Aedes caspius* (Pallas) and *Culex theileri* Theobald. The specimens of *Ae. caspius* from this material had typical specific features.

A case of infestation with one species of the family Oestridae, *Oestrus ovis* Linné, was recorded in man. First-stage larvae of this species were deposited in the eye.

Literature

- Grunin K. Ja., 1957: Nosogločnoye ovoda (Oestridae). Fauna SSSR, Nasekomye dvukrylye, XIX, 3, Izd. AN SSSR, 145 pp., Moskva—Leningrad.
- Gutsevich A. V., 1943: On the mosquitoes of north Iran. Comptes Rendus (Doklady) de l'Academie des Sciences de L'URSS, 40 : 123—125.
- Gučević A. V., Mončadskij A. S., Štachelberg A. A., 1970: Komary-semejstvo Culicidae. Fauna SSSR, Nasekomye dvukrylye, 3 (4), Izd. Nauka, 384 pp., Leningrad.
- James M. T., 1947: The flies that cause myiasis in man. U. S. Government Printing Office. U. S. Dept. Agric. Misc. Publ. no. 631 : 175 pp., Washington.
- Minář J., 1974: Results of the Czechoslovak-Iranian entomological expedition to Iran (with enclosed results of collections made in Anatolia). No. 6: Diptera: Culicidae. *Acta Ent. Mus. Nat. Pragae*, supp. 6 : 87—89.
- Minář J., 1976: Ergebnisse der zoologischen Forschungen von Dr. Z. Kaszab in der Mongolei. Nr. 380. *Annales Hist. Nat. Mus. Hung.* 23, 3—4 : 335—350.
- Porčinskij I. A., 1913: Ovečij ovod (*Oestrus ovis* L.), ego žizň, svojstva, sposoby borby i otnošenje ego k čeloveku. *Tr. bjuro po entomol.*, 10, 3 : 1—64.
- Smith G. V. edit., 1973: Insects and other arthropods of medical importance. 561 pp., London.
- Stone A., Knight K. L., Starcke H., 1959: A synoptic catalogue of the mosquitoes of the world (Diptera, Culicidae). Thomas Say found., Baltimore, Maryland, 6 : 1—358.