

SHORT COMMUNICATIONS

NEW FINDINGS OF WARBLE FLIES (HYPODERMATIDAE, OESTRIDAE) OF WILD ANIMALS IN MONGOLIA

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Abstract. The paper describes warble fly larvae collected from rare wild mammal species living in the region of Central Asia. Eight warble fly species from seven host species were found, out of which four species of warble flies were new for the fauna of Mongolia (*Portschinskia loewii*, *Oestroderma potanini*, *Oestrus caucasicus*, *Rhinoestrus tchernyshevi*). A new host — *Ochotona hyperborea*, was discovered with the species *P. loewii*.

Systematics, biology and distribution of warble flies parasitizing wild animals have been little known so far. The present paper is a contribution to the knowledge of this group in the region of Central Asia.

MATERIAL AND METHODS

The warble fly larvae (a total of 72) were collected during the joint biological Soviet—Mongolian expedition and the zoological Mongolian—Czechoslovak University expedition* organized in the Mongolian People's Republic between 1976 and 1981.

RESULTS

Family Hypodermatidae

Portschinskia loewii (Schnabl, 1877)

Material: 1 larva of 2nd instar, 1 larva of 3rd instar, lgt. D. Bazardorzh, *Ochotona hyperborea* Pallas, 1811, Khubsugul aimak, Khanekh somon, 20. 7. 1978.

The species is distributed in the USSR in the southern part of Siberia, from the Altai to the Far East, parasitic under the skin of *Ochotona alpina* Pallas, 1773 (Grunin 1962). A new species for the fauna of the Mongolian People's Republic. *O. hyperborea* is a new host species of this warble fly.

Oestroderma potanini (Portschinski, 1887)

Material: 2 larvae of 3rd instar, lgt. D. Bazardorzh, *Ochotona alpina* Pallas, 1773, Bayan-Ulgii aimak, Altai somon, Elty-davaa, 21. 7. 1980.

A new species for the fauna of Mongolia. Up to now it was reported from the East Sayan Mts. in the south of central Siberia and from Tibet (Grunin 1962). The Mongolian Altai where this species has been found now, connects the hitherto recorded finding places.

*Results of the Zoological Mongolian—Czechoslovak University expeditions. Contribution No 62.

Oestromyia leporina (Pallas, 1778)

Material: 1 larva of 2nd instar, 12 larvae of 3rd instar, 1gt. M. Khotolkhu, *Ochotona pallasi* Gray, 1867, Gobi-Altai aimak, Tugrek-somon, 2 000 m a.s.l., 8. 7. 1978.

This species was reported from the same host from central Mongolia by Grunin (1962), from south-western Mongolia (Djungaria) by Minář and Lobachev (1981), from *Citellus undulatus* Pallas, 1776 from central Mongolia by Dorzh (1966).

Oestromyia prodigiosa Grunin, 1949

Material: 4 larvae of 3rd instar, 1gt. D. Bazardorzh, *Ochotona daurica* Pallas, 1776, Khubsugul aimak, Khankh somon, Ikh khoro gol, 31. 7. 1976.

The species was reported from this host from eastern Mongolia by Grunin (1962).

Family Oestridae

Oestrus caucasicus Grunin, 1948

Material: 2 larvae of 3rd instar, 1gt. V. S. Lobachev, *Capra sibirica* Pallas, 1776, South Gobi aimak, Gurvan Saichan Mts., 15. 8. 1981.

A new species for the fauna of Mongolia. Up to this time it was reported from the Caucasus and the mountains of the Soviet Central Asia from *Capra cylindricornis* Blyth, 1841 and *C. sibirica* (Grunin 1957).

Oestrus ovis Linné, 1757

Material: 2 larvae of 3rd instar, 1gt. V. S. Lobachev, *Ovis ammon* Linné, 1758, East-Gobi aimak, Ergel-somon (former Khutag-ula somon), Khutag-uul Mt., altitude 1 353 m, 20. 6. 1980. One 3rd instar larva, 1gt. T. N. Sapozhnikov, *O. ammon*, the same locality, 6. 8. 1981.

A common parasite of sheep in Mongolia (Dorzh and Minář 1971, Minář and Dorzh 1974 etc.). It was found on *O. ammon* in Kirghizia (Grebnyuk and Sartbaev 1955). In one of the mentioned cases larvae of *O. ovis* were found together with the larvae of the species *Rhinoestrus tschernyshevi* (see below).

Rhinoestrus tschernyshevi Grunin, 1951

Material: 4 larvae of 3rd instar, 1gt. V. S. Lobachev, *Ovis ammon*, East-Gobi aimak, Ergel somon, Khutag-nul Mt., altitude 1 353 m, 20. 6. 1980.

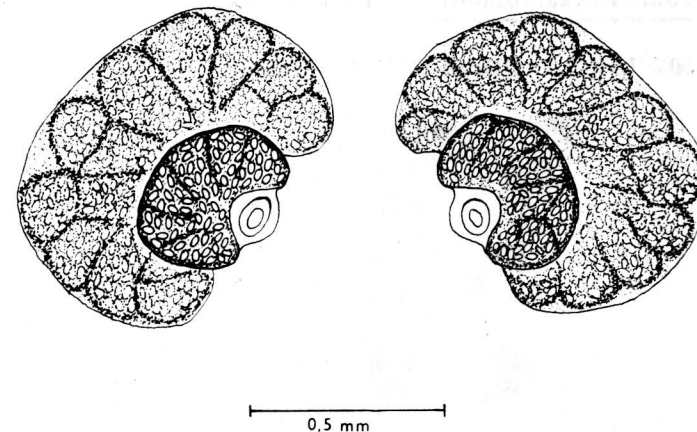
A new species for the fauna of Mongolia. Up to now it was reported from the Soviet Central Asia from *Ovis vignei* Blyth, 1841 and *O. ammon* (Grunin 1957). Larvae of the species *O. ovis* were also simultaneously found on the last mentioned host.

Pharyngomyia dzerenae Grunin, 1950

Material: 8 larvae of 2nd instar, 29 larvae of 3rd instar, 1gt. V. S. Lobachev, *Procapra gutturosa* (Pallas, 1771), Gobi-Altai aimak, Altai somon, 13. 6. 1980.

This species was described only on the basis of larvae collected in Mongolia in this aimak (Grunin 1957). Posterior stigmal plates of 2nd instar larva of this species (prior to moulting into 3rd instar) are depicted in Fig. 1. The adult form is unknown.

Fig. 1. Posterior stigmal plates of 2nd instar larva of *Pharyngomyia dzerenae* Grunin (shortly before moulting into 3rd instar).



НОВЫЕ НАХОДКИ ОВОДОВ (HYPODERMATIDAE, OESTRIDAE)
У ДИКИХ ЖИВОТНЫХ МОНГОЛИИ

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Резюме. В работе описаны личинки оводов, собранных с редких млекопитающих из области Центральной Азии. Всего получено 8 видов оводов с 7 видов хозяев, из того 4 вида оводов оказались новыми для фауны Монголии (*Portschinskia loewii*, *Oestroderma potanini*, *Oestrus caucasicus*, *Rhinoestrus tschernyshevi*); у вида *P. loewii* обнаружен новый хозяин — *Ochotona hyperborea*.

REFERENCES

- DORZH C., To the fauna of warble flies (Diptera, Hypodermatidae) in the Mongolian People's Republic. Entomol. obozr. 45: 210—211, 1966. (In Russian.)
—, MINÁŘ J., Warble flies of the families Oestridae and Gasterophilidae (Diptera) found in the Mongolian People's Republic. Folia parasit. (Praha) 18: 161—164, 1971.
GREBENYUK R. V., SARTBAEV S. K., Warble flies (Oestridae) of wild even-toed animals (*Capra sibirica* Meyer and *Ovis ammon* L.). Tr. Inst. zool. i parazitol. AN Kirgh. SSR 4: 89—94, 1955. (In Russian.)
GRUNIN K. Ya., Warble flies (Oestridae). Fauna of the USSR 19, 3, Izd. AN SSSR, Moskva—Leningrad, 237 pp., 1962. (In Russian.)
MINÁŘ J., DORZH C., Trials with hypodermatid and chlorophos preparations in the treatment of *Oestrus* infestation of sheep. Tr. nauchn. issled. inst. zhivotnovodstva im. Zh. Sambuu, Ulan-Bator, 21: 128—132, 1974. (In Mongolian.)
—, LOBACHEV V. S., Warble flies (Hypodermatidae, Oestridae) of some wild animals from Mongolia and Tuva. Folia parasit. (Praha) 28: 89—91, 1981.

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