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SHORT COMMUNICATIONS

TO THE KNOWLEDGE OF TICKS OF DOMESTIC ANIMALS IN AFGHANISTAN

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Abstract. Thirteen species and subspecies of ixodid ticks were found on cattle, zebu, buffaloes, goats, sheep and camels examined mainly at the abattoir of Kabul between September 21 and October 1, 1974. All of them are already known from the territory of Afghanistan.

The paper brings the results of a joint working team of Czechoslovak and Afghan parasitologists investigating the tick infestation of domestic animals in autumn 1974.

MATERIALS AND METHODS

The animals were examined on September 21 to October 1, 1974 mainly at the abattoir of Kabul. The place of their origin is indicated by locality. Only in Ghazni, Gulbahar and Paghman, the animals were investigated directly in these localities. The buffaloes were imported to Kabul from Pakistan. No exact locality could be given in the case of nomadic camels. All ticks were collected from slightly infested animals, but only some of them from more heavily infested individuals. A total of 432 animals were examined (numbers in parantheses designate positive animals): cattle 124 (99), zebu 8 (7), buffalo 41 (30), goat 185 (31), sheep 60 (1), camel 14 (14).

RESULTS

The following species were found during the investigations:

Haemaphysalis cornupunctata Hoogstraal et Varma, 1962

Material examined: 1♂ 1♀ from 19 goats, 21. 9. 74, no locality; 1♀ from 15 goats, 22. 9. 74, Jalababad; 10♂ 1♀ from 15 goats, 28. 9. 74, Jalalabad.

Haemaphysalis kashmirensis Hoogstraal et Varma, 1962

Material examined: 1♀ from 19 goats, 21. 9. 74, no locality.

Haemaphysalis sulcata Canestrini et Fanzago, 1878

Material examined: 2♂ 1♀ from 15 goats, 22. 9. 74, Jalalabad; 1♂ from 15 goats, 28. 9. 74, Jalalabad; 3♂ 2♀ from 15 goats, 29. 9. 74, prov. of Paghman.

Dermacentor raskemensis Serdjukova, 1948

Material examined: 1♂ 6♀ from 13 goats, 24. 9. 74, Ghazni; 2♀ from 5 goats, 25. 9. 74, prov. of Paktia; 14♂ 2♀ from 10 goats, 25. 9. 74, Ghazni; 20♂ 4♀ from 5 goats, 27. 9. 74, Gulbahar; 2♂ 1♀ from 15 goats, 28. 9. 74, Jalalabad, 4♂ from 5 goats, 30. 9. 74, Ghazni.

Dermacentor niveus Neumann, 1897

Material examined: 1♂ from 13 goats, 24. 9. 74, Ghazni; 1♂ from 10 goats, 25. 9. 74, Ghazni; 2♂ from 5 goats, 30. 9. 74, Ghazni.

Dermacentor marginatus (Sulzer, 1776)

Material examined: 1♂ from 19 goats, 21. 9. 74, no locality; 1♀ from 10 goats, 25. 9. 74, Ghazni.

Boophilus microplus (Canestrini, 1888)

Material examined: 20♂ 80♀ 5 N from 95 cows, 23.—28. 9. 74, Kunduz.

Hyalomma anatolicum anatolicum Koch, 1844

Material examined: 13♂ from 10 cows, 21. 9. 74, no locality; 3♂ from 17 sheep, 22. 9. 74, Kunduz; 378♂ 66♀ from 114 cows, 23.—30. 9. 74, Kunduz; 4♂ 1♀ from 7 camels, 22. 9. 74, no locality; 26♂ from 7 camels, 28.—29. 9. 74, no locality; 150♂ 20♀ from 41 buffaloes, 23. 9.—1. 10. 74, Pakistan; 14♂ from 1 zebu, 28. 9. 74, Kunduz; 30♂ 11♀ from 7 zebu, Pakistan?

Hyalomma anatolicum excavatum Koch, 1844

Material examined: 1♀ from 6 buffaloes, 23. 9. 74, Pakistan; 11♂ 16♀ from 83 cows, 25.—30. 9. 74, Kunduz; 1♀ from 15 goats, 22. 9. 74, Jalalabad; 1♀ from 15 goats, 28. 9. 74, Jalalabad.

Hyalomma dromedarii Koch, 1844

Material examined: 97♂ 10♀ from 14 camels, 22.—29. 9. 74, no locality; 3♂ 1♀ from 83 cows, 25.—30. 9. 74, Kunduz; 3♂ 3♀ from 25 buffaloes, 30. 9.—1. 10. 74, Pakistan.

Hyalomma asiaticum asiaticum Schulze et Schlottke, 1929

Material examined: 11♂ 7♀ from 83 cows, 25.—30. 9. 74, Kunduz; 3♀ from 7 camels, 28.—29. 9. 74, no locality; 1♂ 1♀ from 7 zebu, 30. 9. 74, Pakistan?; 3♂ 3♀ from 22 buffaloes, 1. 10. 74, Pakistan.

Hyalomma marginatum turanicum Pomerancev, 1946

Material examined: 2♂ 1♀ from 28 buffaloes, 23. 9. and 1. 10. 74, Pakistan.

Hyalomma marginatum isaaci Sharif, 1923

Material examined: 1♂ 1♀ from 15 goats, 22. 9. 74, Jalalabad; 1♀ from 7 buffaloes, 26. 9. 74, Pakistan; 1♂ from 15 goats, 28. 9. 74, Jalalabad; 1♂ from 4 camels, 28. 9. 74, no locality; 1♂ from 16 cows, 30. 9. 74, Kunduz.

Rhipicephalus turanicus Pomerancev, 1946

This species, although not found during our autumn collections, was represented in each lot of several orientational collections in the spring: 1♂ 1♀ from 2 sheep, 13. 4. 74, Kabul; 8♂ 4♀ from 4 sheep, 9. 4. 74, Azaradhjan. These findings are reported here to show more completely the existing tick species parasitizing sheep in Afghanistan.

The tick fauna of Afghanistan was already dealt with in several papers, in the last years e.g. by Kaiser and Hoogstraal (1963) and Hoogstraal (1973). All species found during our investigations are already known from this territory. The results summarized in Table 1 show the following facts.

1. *Hyalomma a. anatolicum* is the most common tick in this season of the year. It predominates clearly on cattle, zebu and buffalo.

2. Goats are infested almost exclusively by the members of the genera *Haemaphysalis* (3 species) and *Dermacentor* (3 species) but mean infestation per host is low.

3. Mean infestation per host in domestic animals parasitized by various *Hyalomma* species reaches clearly higher values.

Table 1. Survey of tick species found on different hosts in Afghanistan (21. 9.—1. 10. 1974)

Host	Examined	*Haemaphysalis cornupunctata*		*Haemaphysalis kashmirensis*		*Haemaphysalis sulcata*		*Dermacentor raskemensis*		*Dermacentor niveus*		*Dermacentor marginatus*		*Boophilus microplus*		*Hyalomma anatolicum anatolicum*		*Hyalomma anatolicum excavatum*		*Hyalomma dromedarii*		*Hyalomma asiaticum asiaticum*		*Hyalomma marginatum turanicum*		*Hyalomma marginatum isaaci*	
		♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀	♂	♀
Cattle	124													20	80	391	66	11	16	3	1	11	7			1	
Zebu	8															44	11					1	1				
Buffalo	41															150	20		1	3	3	3	3	2	1		1
Goat	185	11	3		1	6	3	41	15	4		1	1						2							2	1
Sheep	60															3											
Camel	14															30	1			97	10		3			1	
In total	432	11	3	0	1	6	3	41	15	4	0	1	1	20	80	618	98	11	19	103	14	15	14	2	1	4	2

4. The infestation of sheep is extremely low. This is in contrast with our spring findings when the species *Rhipicephalus turanicus* which is completely lacking in our autumn collections was found relatively often.

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МАТЕРИАЛЫ К ПОЗНАНИЮ ИКСОДОВЫХ КЛЕЩЕЙ ДОМАШНИХ ЖИВОТНЫХ АФГАНИСТАНА

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Резюме. Обнаружено 13 видов и подвидов иксодовых клещей на скоту, зебу, буйволах, козах, овцах и верблюдах, обследованных главным образом на бойне в Кабуле с 21-го сентября по 1 октября 1974 г. Все они уже известны с территории Афганистана.

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