

VETERINARY SCIENCES

SPECIES COMPOSITION AND DISTRIBUTION OF IXODID TICKS INHABITING THE TERRITORY OF TURKESTAN REGION

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Introduction. Turkestan region and its adjacent territories are endemic zones, where ixodid ticks, which are vectors of Crimean-Congo hemorrhagic fever virus, are widespread.

To study the fauna and species composition of ixodid ticks of Turkestan region, parasites were collected in 72 settlements and their surroundings: in Abai, Al-Farabi, Baidibek, Enbekshi, Kazygurt, Karatau, Ordabasy, Sairam, Sozak, Tolebi and Tulkubas districts. During the research 241 heads of cattle and 9 heads of small horned cattle, 10 heads of horses, 2 dogs, a room for keeping small horned cattle (koshara), 1 shed in a private farmstead were examined. Overall, 5928 specimens of ticks were collected.

Methods. During the research 241 heads of cattle and 9 heads of small horned cattle, 10 heads of horses, 2 dogs, 1 room for keeping small horned cattle (koshara), 1 shed in a private farmstead were examined. 5928 specimens of ticks were collected.

Results. A total of 262 animals were examined, ticks were found on 241 of them (IO - 92%). A total of 4751 tick specimens were collected from the examined animals, which is an average of 18.1 specimens. In the vicinity of 24 surveyed settlements (in pastures), 1117 ticks were collected on the flag.

All collected ticks were identified, so we identified 10 species of the family Ixodidae: *Dermacentor marginatus*, *D. niveus*, *Haemaphysalis punctata*, *H. sulcata*, *Hyalomma anatolicum*, *H. asiaticum*, *H. scupense*, *H. turanicum*, *Rhipicephalus annulatus*, *Rh. turanicus*.

Dermacentor marginatus. A total of 38 specimens were collected, of which 36 specimens were found on cattle. The index of occurrence (IO) of ticks on domestic animals was 0.71% and the index of abundance (AI) was 0.14 specimens.

D. niveus - a total of 265 specimens were collected: 85 specimens on cattle and 180 specimens on pastures. The occurrence of ticks on cows was low, 3.73%, with a very low abundance of 0.35 specimens.

Haemaphysalis punctata. A total of 221 ticks were collected. Thirty-eight exemplars were taken from cattle and 183 exemplars were collected on the flag from pastures. The occurrence of ticks on cattle was 3.73% with an abundance of 0.15 exemplars.

H. sulcata - 755 specimens were collected: from cattle - 6 specimens, from small cattle - 30 specimens, on pasture - 719 specimens. The occurrence of ticks on

cattle was 1.65% with an abundance of 0.02 specimens, on small cattle - 11.1 with an abundance of 3.33 specimens.

Hyalomma anatolicum. The frequency of ticks on cattle was 37.3%, on small cattle - 11.1%, on horses - 40%, and abundance - 5.41, 0.55 and 3.3 specimens, respectively. Ticks were found in all surveyed areas.

H. asiaticum - a total of 298 ticks were collected. A total of 271 specimens were collected from cattle and 27 specimens from small cattle. The occurrence of ticks on cattle was 4.14%, on small cattle - 33.3, and abundance - 1.12 and 3, respectively.

H. scupense. Detected in all surveyed areas. The incidence of ticks on cattle was 34.0%, on horses - 60%, and on small cattle - 11.1%. The abundance of ticks was 10.7, 4 and 0.77, respectively.

H. turanicum. 230 specimens were collected. On cattle the occurrence was 9.12%, on small cattle - 22.2%. The AI on cattle was 0.78 specimens, on small cattle 1.0 specimens, and 32 specimens were collected on pasture.

Rhipicephalus annulatus. In Ordabasy and Sairam districts 57 ticks were collected. All ticks were collected from cattle. The frequency of occurrence was 2.07 % with an abundance of 0, 23 specimens.

Rh. turanicus. 16 specimens were collected. 10 specimens were collected from cattle and 6 specimens from two examined dogs. The occurrence of ticks on cattle was 2.90 % with an abundance of 0.04 exemplars, and on dogs the abundance index was 5 exemplars.

Conclusions. As a result of our research we found that the widespread and frequently occurring species include ticks of the genus *Hyalomma*: among which *H. scupense* and *H. anatolicum* were found in almost all settlements. Their occurrence ranged from 11.1% (*H. anatolicum* on small cattle) to 60% (*H. scupense* on horses) and abundance ranged from 0.77 (*H. scupense* on small cattle) to 10.7 (*H. scupense* on cattle). Therefore, based on the conducted studies, we can assume that the most massive and widespread tick species *H. scupense* and *H. anatolicum* play a significant role in the transfer of the Crimean-Congo hemorrhagic fever pathogen in the territory of Turkestan region.

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