

showed a large number of very small cysts attached to lungs, intestines, kidneys, etc. The cysts were examined and found to be only bacterial. The general examination of the various organs revealed infection of liver and gall bladder only. The liver showed white spots on its lobes, which gave these a pathogenic appearance. The liver had 16 liver flukes in its bile ducts. All the flukes were fully gravid. The gall bladder which was very much inflated was full of trematode eggs, which were later found to be of the flukes recovered from the liver. The flukes resembled *Mehraorchis ranarum* Srivastava, 1934. The general shape of the body and the topography of the various organs were as described by Srivastava (1934). The spines on the body were quite sharply distinguished and were projecting out of the surface very conspicuously, at least along the anterior end and the margins of the body. These were densely crowded at the genital opening. The uterine coils extended, in the majority of the specimens, beyond the intestinal caeca posteriorly and the caeca were more or less hidden under the coils all along their length. The vitellaria extended up to the levels of the anterior end of the pharynx and the posterior end of the ventral sucker. At least in their anterior region the vitellaria of the two sides continued in the middle of the body, even overlapping the oesophagus. The measurements of the various organs though different from those given by Srivastava (1934) were not taken into consideration as the flukes were found to be of the same type.

As no flukes have so far been recorded from the liver of frogs in India, I have called it the liver fluke of frog.

DEPARTMENT OF ZOOLOGY,
LUCKNOW UNIVERSITY.
December 29, 1956.

R. S. TANDON

REFERENCES

Srivastava, H. D. (1934): *Bull. Acad. Sc., U.P.* 1934.

18. TICKS FROM BALUCHISTAN, WEST PAKISTAN

During the Peabody Museum-Harvard Expedition to West Pakistan, 1955, some *Ixodoidea* were collected.

1. *Hyalomma excavatum*. A specimen was obtained by the writer at Little Kapoto, 10 miles south of Kalat.

2. *Hyalomma marginatum*. One specimen collected at Koh-e-Murid, 2 miles south of Turbat in Mekran, by Naem Beg Chughtai, University of Karachi Zoologist, from the bark of an acacia tree (*B. kahur*). This large tree is held sacred by the Zikris, a religious sect in Mekran.

The determinations were made by Dr. Harry Hoogstraai, U. S. Naval Medical Research Unit No. 3, in Cairo.

3551 MAIN HIGHWAY,
COCONUT GROVE,
FLORIDA, U.S.A.,
November 14, 1956.

HENRY FIELD



Field, H. 1957. "Ticks from Baluchistan, West Pakistan." *The journal of the Bombay Natural History Society* 54, 469–469.

View This Item Online: <https://www.biodiversitylibrary.org/item/186985>

Permalink: <https://www.biodiversitylibrary.org/partpdf/153344>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: In Copyright. Digitized with the permission of the rights holder

License: <http://creativecommons.org/licenses/by-nc/3.0/>

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.