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THE ELEPHANT LOUSE, *HAEMATOMYZUS ELEPHANTIS* PIAGET, 1869,
ON WILD AFRICAN ELEPHANTS AND WARTHOGS^{1 2}

(MALLOPHAGA, HAEMATOMYZIDAE)

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In reviewing the taxonomy, distribution, and host relationships of the elephant louse, *Haematomyzus elephantis* Piaget, 1869, Ferris (1931) stated, "Apparently all the specimens thus far taken of this species have been from animals in captivity. It is evidently normal to the Indian elephant, and whether the original record from African elephant, and above all, that from rhinoceros, indicate anything more than purely chance occurrences in zoological gardens remains to be determined."

On 1 August 1956, Mr. Makram N. Kaiser of the NAMRU-3 staff examined a warthog, *Phacochoerus aethiopicus* subsp., at Maji ya Chumvi, Meru District, Kenya, at about 4800 feet elevation, a moment after the animal's death. He collected approximately 125 immature and adult *Haematomyzus elephantis* [together with one male, four females and nine nymphs of *Haematopinus phacochoeri* Enderlein (P. Johnson, det.)] from hairs on all parts of the animal's body but chiefly on the mane and head. Maji ya Chumvi is a salty water hole in a widely scattered acacia savannah. A few days previously, an elephant, *Loxodonta africana* subsp., shot in Meru Forest, an indigenous woods about ten miles from the water hole, had yielded only a single specimen of the same species of louse in spite of diligent search for others. Another elephant examined in the same locality was entirely free of lice.

Haddow (1957a) noted a heavy infestation of *H. elephantis* on a warthog shot in 1956 in Karamoja District, Uganda, and stated especially that the host record was an accurate one. Reid (1954) collected only two specimens of *H. elephantis* on an elephant near Yirol in the southern Sudan and stated that no other lice were found on seven other elephants that he examined in this area. Hopkins (1938) reported on specimens of *H. elephantis* from two elephants shot by Mr. T. W. Chorley in Ankole District, Uganda, and noted that Mr. Chorley had found none on two elephants shot in another district of Uganda. Bequaert (1930, p. 997) noted *H. elephantis* from an elephant at Api, Belgian Congo. While the Api elephants are captives in a work and

¹ Research Report NM 52 08 03.13. The opinions and assertions contained herein are the private ones of the author and are not to be construed as official or reflecting the views of the Navy Department or the naval service at large.

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training farm, they are obtained in northeastern Belgian Congo. No elephant lice were found on "quite a number" of elephants shot in the Semliki Forest, Uganda, near the Congo border, between 1942 and 1948 (Haddow, 1957b).

This evidence establishes that *H. elephantis* occurs in nature in Kenya, Uganda, Sudan, and Belgian Congo, and that it normally infests warthogs as well as elephants. From recent statements by Mukerji and Sen-Sarma (1955) there appears to be little doubt that this louse also infests elephants in India. These authors, in addition to an excellent review of previous literature on anatomy and affinities of the insect, observe that these parasites are seldom seen on well groomed elephants and that they die within three hours when transferred to other mammals.

On the basis of the Indian observations noted above, it is possible that the large number of elephant lice found on African warthogs and the small number found on African and Asiatic elephants reflect differences in cleanliness of the two animals. If this is not the true explanation of abundance on warthogs it might be considered that warthogs are the true hosts of *H. elephantis* and elephants adventitiously acquire small infestations at common mud wallows. Yet *Haematomyzus*, so distantly related to all other lice, seems rather more a parasite of an isolated group like the Elephantidae, from which no other lice are known, than of Suidae. In zoological gardens infestations persist for some time on elephants.

REFERENCES

- Bequaert, J. G., 1930. Entomology. Medical and economic entomology. In: R. P. Strong, ed. The African Republic of Liberia and the Belgian Congo (based on the observations made and materials collected during the Harvard African Expedition 1926-1927). Contr. Dep. Trop. Med. & Harv. Inst. trop. biol. Med., (5), 2:797-1001.
- Ferris, G. F., 1931. The louse of elephants *Haematomyzus elephantis* Piaget (Mallophaga:Haematomyzidae). Parasitology, 23(1):112-127.
- Haddow, A. J., 1957a. Unusual ectoparasite on a warthog. Ann. Rept. Game Fish. Dept. Uganda (1 Jan. 1955 to 30 June 1956), p. 24.
- , 1957b. Personal communication.
- Hopkins, G.H.E., 1938. Stray notes on Mallophaga. Ann. Mag. Nat. Hist., S.11, 2(8):191-198.
- Mukerji, D., and Sen-Sarma, P., 1955. Anatomy and affinity of the elephant louse *Haematomyzus elephantis* Piaget (Insecta: Rhyncophthiraptera). Parasitology, 45(1-2):5-30.
- Reid, E.T.M., 1954. A further record of *Haematomyzus elephantis* Piaget (Rynchophthirina) from a wild African elephant. Entom. Mo. Mag., 90:85.