

Case report

The First Report of *Amblyomma lepidum* (Donitz, 1909) in IRAN

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Abstract

Amblyomma lepidum (Donitz, 1909), collected on sheep from Gilan gharb, is reported for the first time from Iran. The species has been reported from Sudan, Ethiopia, Kenya, Egypt and Zanzibar as well. Male diagnosis: A small to medium – sized tick; scutum with characteristic ornamentations; postero- median stripe broad at the base, slightly knobbed at the anterior extremity, not reaching the falci- form stripe; postero- accessory stripes short, fairly close to the 3rd lateral spots, almost vertical; eyes small, dark coloured, hemispherical, orbited; festoons parti- coloured.

Keywords: *Amblyomma lepidum*, Ticks, Case report, Sheep, Iran

Introduction

The genus *Amblyomma* ticks are large and beautifully ornamented with long mouth parts; possessing eyes and festoons. All *Amblyomma* appear to have a three-host life cycle (1, 2). The host range is also very wide, including examples from most of the orders of terrestrial mammalia, particularly ungulates, birds are rarely attacked by the adult forms, but are frequently the hosts of the immature forms (nymphs and larvae) of certain species(3). Immatures of many species will infest humans and are known as seed ticks (1, 2).

Regarding the economic aspect, the genus *Amblyomma* is less important than other genus. Some species of genus *Amblyomma* are important transmitters of veterinary diseases, such as tick typhus, Q fever and heart- water fever(4).

Male description

Body Length 4.8mm, width 3.7mm, contour broad oval, slightly narrower in front.

Scutum Ornate, with dark-brown or brownish-black markings on a pale ground; postero-median stripe broad at the base, slightly knobbed at the anterior extremity, not reaching the falci- form stripe; postero- accessory stripes short, fairly close to the 3rd lateral spots, almost vertical; lateral spots usually conjoined to form a broad bowed lateral stripe, the extremities of which are fused with the dark marginal coloration; antero- accessory stripes fused with the extremities of the falciform stripe and usually with the 1st and 2nd lateral spots; cervical stripes broad anteriorly, tapering posteriorly, not reaching the antero- accessory stripes; frontal spots fused with the cervical stripes; festoons parti- coloured, the external, 4th and median festoons dark- coloured, the 2nd, 3rd and 5th each with a pale spot; a pale spot on the marginal ridge opposite the 2nd lateral spot; cervical grooves short, deep and curved with the convexity external; marginal groove deep, commencing a short distance behind the eyes, continuous; punctations numerous, irregular, coarse

in the lateral fields, between the cervical stripes and on the marginal ridge and festoons; eyes small, dark- coloured, hemispherical, orbited (Fig. 1, 6).

Vente Pale yellowish- grey; genital aperture opposite coxae II; spiracles large, triangular with rounded angles (Fig. 2).

Capitulum Length 2mm.; basis rectangular, postero- lateral angles broadly rounded, barely salient, lateral margins slightly convex; palps long and slender, article 2 two- and- a- half

times as long as article 3; hypostome dentition 4 | 4 (Fig. 3).

Legs Stout, dark- brown, with broad, pale annulations at the distal extremities of the articles; coxa I with two, stout, unequal spurs, the external spure being the longer and more pointed; a broad, curved, salient ridge on each of coxae II and III; a single, stout spur, twice as long as broad, on coxa IV; tarsi abruptly attenuated (Fig. 4, 5, 7) (3, 4).

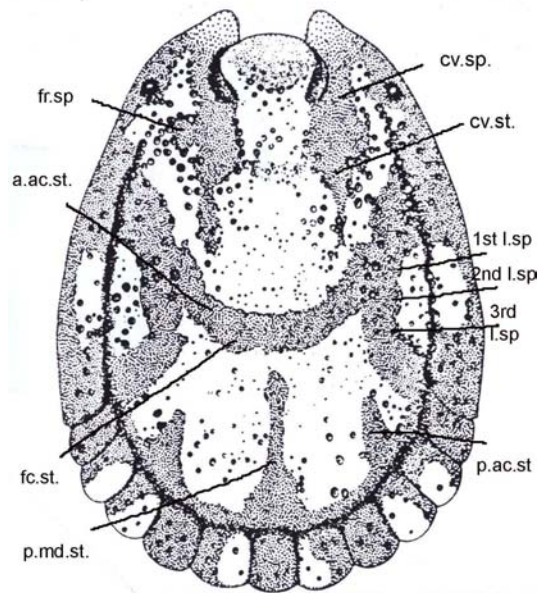


Fig.1: Ornamentation of scutum in *Amblyomma lepidum*. a. ac. st. antero-accessory stripe, cv. sp. cervical spot, cv. st. cervical stripe, fc. st. falciform stripe, fr. sp. frontal spot, l. sp. lateral spot, p.ac. st. postero-accessory stripe, p. md. st. postero-median stripe.

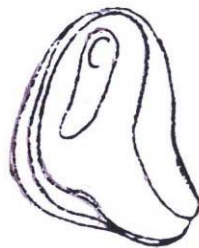


Fig. 2: Spiracle of *Amblyomma lepidum*

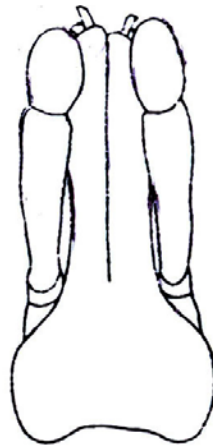


Fig. 3: Capitulum of *Amblyomma lepidum*

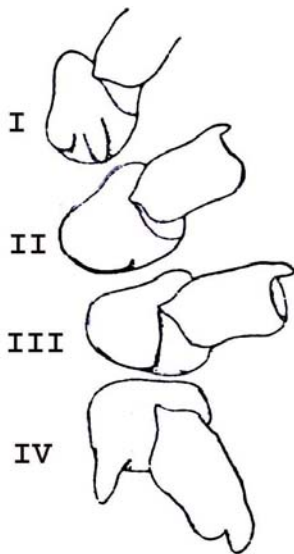


Fig. 4: Coxae I-IV of *Amblyomma lepidum*

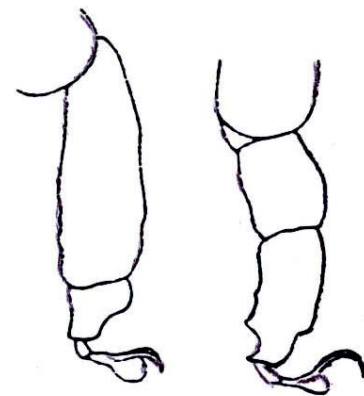


Fig. 5: Tarsi I and IV of *Amblyomma lepidum*



Fig. 6: Dorsal view of *Amblyomma lepidum*



Fig. 7: Ventral view of *Amblyomma lepidum*

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