

Ticks in the South African Zoological Survey Collection. Part II.

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AMBLYOMMA SYLVATICUM, de Geer, 1778.

Synonym: *A. latum* Koch 1844.*

The Lesser (South African) Tortoise Tick.

Male (Figs. 1, 2 and 3.)

A SMALL ornate tick; up to 5 mm. × 4 mm.; very broadly oval, widest at about the middle; *Conscutum* somewhat convex. Cervical grooves, short, deep and narrow and slightly curved with convexity external. Marginal grooves absent, represented by a row of evenly spaced, large punctations commencing some distance behind the eyes and ending at the first festoon. A background of small, shallow, somewhat unevenly distributed punctations present on the whole *conscutum*; a few large coarse punctations on the shoulders, the lateral and posterior parts, the festoons and marginal ridge. *Eyes*, small, dark, hemispherical, deeply orbited; far forward, on a level with the cervical groove. Festoons well marked. The ornamentation is limited to a narrow pale strip, which may show an iridescent sheen, edging the "marginal groove" and extending on to the first two festoons. The outline of the female scutum may be quite pronounced.

Basis capituli.—Subtriangular, with lateral margins convex and postero-lateral corners also rounded, deep brown in colour and pale at the base of the whitish sheath. The *subcollare* (of Schulze 1935) is enamelled. Palps relatively broad, constricted at base of article 2; long white hairs present; article 2 twice as long as article 3; article 3 broader than long with anterior extremity rounded; white enamelling edging posterior, internal and anterior margin of article 2; internal and anterior margin of article 3. Ventrally the anterior point of article 1 is also enamelled. Hypostome 4/4, teeth in anterior 1/3; ventrally the *basis capituli* is subcircular.

Ventral surface lighter in colour than dorsal. Genital pore opposite coxae II.

Legs dark brown, with narrow white enamelled distal annulations, and a dorsal enamelled strip on all segments, except on the tarsus, which shows no enamelling whatsoever; pale hairs present. Tarsal termination as in Fig. 3, a and b. Coxae i-iii, a pair of short rounded spurs; on Coxa iv the inner spur usually much smaller than the outer and quite inconspicuous.

* For further synonymy see Bequaert 1932.

Female (Fig. 4).

A medium sized ornate tick; when engorged up to 14 mm. *Scutum*: heartshaped, postero-lateral margin sinuous; cervical grooves, deep and narrow, curved to form an inverted S. No lateral grooves. A background of medium-sized somewhat unevenly distributed punctations; a few large punctations on the shoulders, and anteriorly on the central field. *Eyes* small, dark, hemispherical, deeply orbited. The pale ornamentation is widespread, leaving a fairly wide cervical stripe. A dark marginal band joins the large ocular spot anteriorly with the cervical stripe, and posteriorly with the limiting spot; frontal spot small, irregular.

Basis capituli roughly triangular with lateral margin convex, and postero-lateral corners also rounded; deep brown in colour, pale towards the base of the sheath, (Robinson figures it as having a light patch between the porose areas). *Areae porosae* oval, diverging anteriorly; distance apart not quite twice the diameter. In the two females available it is difficult to see whether the *subcollare* is enamelled as in the male or not; palps and hypostome as in the male (Robinson gives article 2 as three times as long as 3).

Ventral surface.—Legs, coxae and tarsi as in male, except that the spurs on coxa iv are more equal in size.

Nymph (Fig 5). Length 2 mm. to 3 mm.

Scutum ornate; slightly broader than long, postero-lateral margin straight, or but slightly sinuous, posterior angle broad; cervical grooves deep and strongly curved, with convexity external, the posterior tip may bend slightly outwards, giving an S shaped groove (as described for the female). Punctations, large, deep, fairly far apart, fairly evenly distributed. *Eyes* small, dark, hemispherical, deeply orbited. The ornamentation is very striking, a broad enamelled strip present in the lateral field extending almost to the anterior edge of the collar; it is interrupted by a dark frontal spot; the anterior portion of the central field is also enamelled, the enamelling edging the emargination right up to and including the small knob on the shoulder. The area around the eye is darker than the rest of the scutum.

Basis capituli triangular with rounded corners as in the male and the female. The enamelling occupies the central area and is roughly hour-glass shaped. Palps as in the male, with article 2, however, not quite twice article 3.

Legs as in the male; coxae i and ii with a pair of short rounded spurs; coxae iii and iv with external spur only (Bedford and Hewitt give coxa iii with two spurs, and coxa iv with a trace of an inner spur).

Larva (Figs. 6 and 7). 1.1 mm. × .8mm.

Subcircular widest in posterior portion; convex. *Scutum*: much shorter than broad (1:1.75). Cervical grooves short, narrow, slightly curved. *Eyes* relatively large, hemispherical, orbited; about midway. Colour of scutum light brown, with deeper pigmentation round the eyes as in the nymph and adults; no light patches or enamelled ornamentation could be seen in the specimens examined; *Basis capituli* subcircular, wider than long. Palps broad, article 3 about as long as 2 (long white hairs?); article 3 with a marked ridge below article 4 on the ventral surface. Hypostome 2/2 of 5 teeth, on anterior 1/3.

Legs.—Coxa i with internal spur only; coxae ii and iii with a broad flat spur towards the middle of the posterior margin.

Host.

The Onderstepoort collection contains the following lots off the tortoise *Chersinella schönlandi*, from Namaqualand: 5 males; 1 female; 1 female + larvae; and one lot of males and nymphæ off the tortoise, *Chersine angulata* from Essendene, Eastern Province (this is the batch described by Bedford and Hewitt 1925).

Bedford and Hewitt also list it from *Chersine angulata* from Malmesbury, Western Province; from Port Elizabeth, Eastern Province; and from a mole snake, *Pseudaspis canã* from Port Elizabeth.

L. E. Robinson in the Monograph lists it from the Cape of Good Hope; off a tortoise Cape of Good Hope, and from Kaffraria (Eastern Province); and 1 female off a Virginian deer in the Zoological Gardens, Hamburg.

Warburton (1927), lists three tubes of specimens in the Vienna Museum as from Natal and "Cape Zelandor" (I have not been able to find this Cape on any map of South Africa) and gives the one host as one of the common Cape tortoises—*Homopus areolatus*, and the other host as *Tityus lineatus*. (An American scorpion!—undoubtedly another case of interchange of labels).

De Geer's original specimen was collected off a tortoise by Sparmann in his travels at the Cape.

REFERENCES.

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- ROBINSON, L. E. (1926). *Ticks: A monograph of the Ixodoidea. The genus Amblyomma.* Cambridge University Press.
- SCHULZE (1935). Zur Vergleichenden Anatomie der Zecken. *Zeitschr. Morph. & Okol. der Tiere* Vol. 30, p. 19.
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Fig. 1.



Fig. 3.

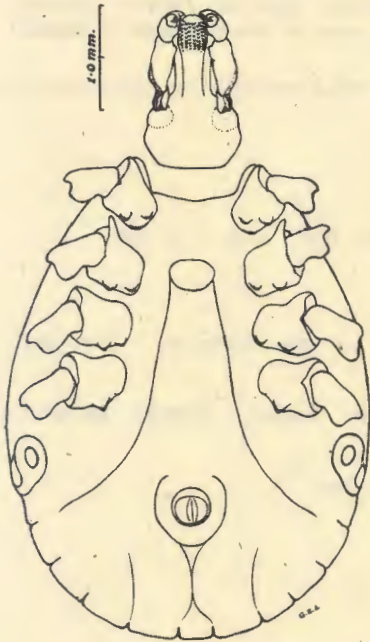
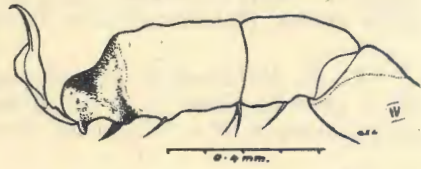


Fig. 2.

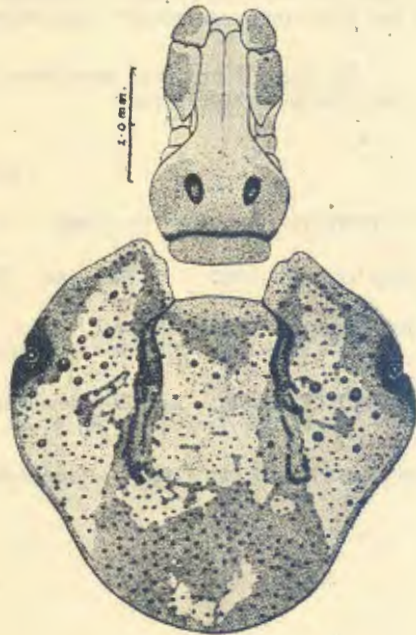


Fig. 4.

- Fig. 1.—Male Dorsal View. Bedford del.
Fig. 2.—Male Ventral View. G. E. Laurence del.
Fig. 3.—Tarsus I and Tarsus IV. G. E. Laurence del.
Fig. 4.—Female Dorsal View. G. E. Laurence del.

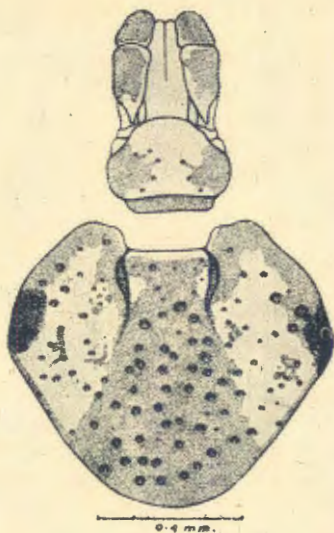


Fig. 5.

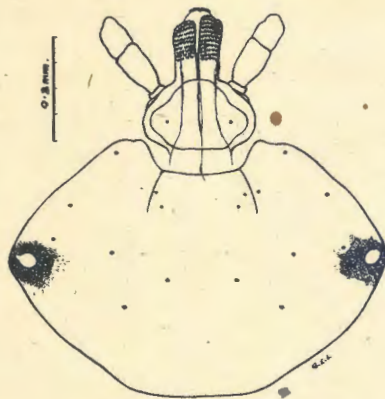


Fig. 6.

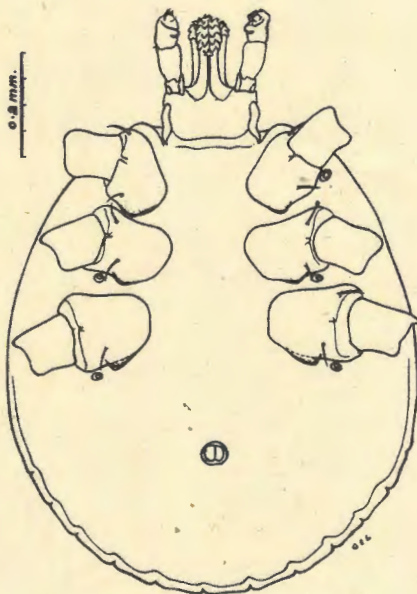


Fig. 7.

Fig. 5.—Nymph Dorsal View. G. E. Laurence del.

Fig. 6.—Larva Dorsal View. G. E. Laurence del.

Fig. 7.—Larva Ventral View. G. E. Laurence del.