A TICK ON THE UPPER EYE-LID

(Dermacentor auratus nymph)

BY

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THE following rare and interesting case recently came for treatment at the Eye Infirmary, Medical College, Calcutta.

M. I. Mohamedan male, 22 years of age, a shoe-maker by occupation, gave a history of being bitten by an insect on the upper eyelid while playing with a dog two weeks ago. The small growth was gradually getting larger. On examination, a small Tick was found attached to the inner end of the lower border of

Tick on the upper eye-lid (*Dermacentor auratus* nymph).

the left upper eyelid. Under cocaine anaesthesia it was removed without difficulty. Microscopic examination showed that it was a nymphal form of *Dermacentor auratus*. It has been recorded a few times from man in India but usually lives on wild animals.

A drawing of the *Dermacentor auratus* nymph by Sharif is shown in Fig. 1.

Nymph.—The scutum is sub-hexagonal, being broadest in the middle. Its size is 0.5×0.54 mm. It is brown in colour, changing to reddish-brown near the eyes. The cervical grooves are anteriorly deep and convergent; they then become divergent and superficial and finally disappear in the posterior third of the scutum. The

lateral grooves are shallow and superficial and together with the cervical grooves enclose superficial cervical fields. There are ill defined superficial grooves along the antero-lateral margins of the scutum. The punctuations are few and superficial, and are present only in the posterior portion of the median field. The spiracle is pear-shaped. Coxa I has two fairly strong, well separ-

FIG. 1.

Dermacentor auratus nymph: (a) Scutum, $\times 71$; (b) Coxal armature, $\times 55$; (c) Tarsus IV, $\times 55$; (d) Spiracle, $\times 140$; (e) Capitulum, dorsal aspect, $\times 128$; (f) Capitulum, ventral aspect, $\times 128$.

ated and equal spurs. Coxae II-IV have each a pointed triangular spur near the external angle. Tarsus IV tapers gradually and is without any ventral spur. The pad attains two-thirds the length of the claws.

The capitulum differs considerably from that of the adult. It is 0.38 mm. in length. The base is hexagonal in shape with the lateral angles strongly pointed and salient; it is two and a half times as broad as long. The cornua are absent. The palps are long, being four times as long as broad. All the articles of the palps are distinct. Article I bears a long slightly feathery hair on its infra-internal margin. Article II is twice as long as Article III and is without any ridge or salience: it bears one long hair on

its supra-internal and one hair on the infra-internal margin. Article III is longer than broad. The hypostome is strongly spatulate and possesses 3/3 rows of teeth with six strong teeth in each row in the anterior half, and these are followed by 2/2 rows of seven scale-like teeth.

Distribution and hosts. The species has so far been recorded from Borneo, Java, Sumatra, Burma, and new records show that the distribution of the species extends almost throughout India. It normally attacks only wild animals and hence is of little economic importance.

I wish to express my thanks to Doctor C. Strickland, Professor of Entomology at the Tropical School of Medicine, Calcutta, for identifying the specimen.

REFERENCE

Sharif, M. — *Records of the Indian Museum*, Vol. XXX, Part III, pp. 217-344.

RED MULTIPLE MADDOX ROD WITH A PRISM*

BY

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AFTER considerable difficulty had been experienced in obtaining a Maddox rod without an undesirable prism of varying strength, the advantage of incorporating a prism of known strength in the Maddox rod became apparent and the rod to be described was constructed.†

The literature from 1890 (the time when Maddox¹ first presented this important diagnostic instrument) to the present apparently contains no reference to the intentional incorporation of a prism in the rod‡ or the routine use of a weak prism with the rod although its optical defects have been noted,² and ingenious adaptations have been suggested.^{3, 4}

One of the cleverest adaptations is that of Ballantyne⁵ who modified the Maddox rod so that the vertical and horizontal deviation could be determined simultaneously and the axis of the single prism indicated without the use of formulae or prismometric scales, which will correct the combined deviation.

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† Made by E. B. Meyrowitz Company, New York, N.Y.

‡ This statement was confirmed by Miss Maddox.⁶