

only free on grass and bushes in the "tierra caliente" and "tierra fria" of Guatemala (Retalhuleu, Guatemala city). The female, which abounds in the woods and savanas on grass and bushes, is occasionally rubbed off by horses, cattle, or dogs, and even by man. It adheres tenaciously to the skin, fixing itself by perforating the cutis with its sucking-apparatus; and remains, when undisturbed, for several days, till filled with blood, and then probably falls off spontaneously by its own weight. If forcibly removed, the sucking-apparatus breaks off and remains in the wound, causing a disagreeable and sometimes painful inflammation for a considerable time, but I never saw any serious consequences result from it. Even in its juvenile state the garrapata is of parasitic habits. The young, which are distinguished by the inhabitants of Guatemala by the name of "mostacilla" (derived from "mostaza," mustard), hang to the grass in clusters of thousands, especially during the dry season; and by their creeping on the bare skin and frequent biting they form one of the greatest plagues to the European traveller, who is sometimes kept awake for hours during the night by them. The males I have heard spoken of as "conchuda." The female has been collected by Mr. Janson in Nicaragua, by Mr. Rogers in Costa Rica, and by myself in many places of the "tierra caliente" and "tierra fria" of Western Guatemala (Retalhuleu, Escuintla, Antigua, Guatemala city).

*Remarks.* Though I have not seen the types of *A. mixtum*, which Koch describes as from Mexico, I cannot doubt that the above described *Amblyomma* really belongs to that species. As Koch describes and figures both sexes, his must therefore have been a common species; and the above described is the most common of all Ixodidæ in Central America, and probably also in Southern Mexico.

## 2. *Amblyomma foreli*, sp. n. (Tab. XII. figg. 3-3 b; and Tab. XIV. figg. 3, 3 a-3 d, ♀.)

♂ latet.

♀. Corpus ovato-depressum, abdominis cuticula (in exemplo satiato, in alcoholo præservato) ex griseo fusca seu olivacea, punctis, striolis transversalibus atque maculis numerosis fuscis marmorata. Scutum occipitale oblonge triangulatum, angulis rotunde truncatis, planum, nitidum, punctis nigris magnis raris impressis in superficie dorsuali ornatum, nigrum, in angulo postico maculam colore sucineo ferens, e qua stria lata mediana obscure castanea ad marginem scuti anteriorem petens nascitur. Margo humeralis punctis impressis caret. Scutum frontale nigrum, nitidum, punctis impressis raris ornatum; foveolæ duæ frontales oblongæ, postice truncatæ, antice angulatim protractæ. Arca mandibularis basi nigra, apicem versus flavescens, hamulis quinque, binis in primo, ternis in secundo ramo dispositis armata; arca maxillaris colore succineo. Palpi fusci, nitidi, superficie interna deplanati, externa convexi; articulus quartus minimus tertio excentrice insertus. Pedes ex piceo fusci, setulis paucis instructi. Lamina stigmatica triangularis, angulis late rotundatis, rima stigmatica claviformi. Lamina analis utriusque lateris setas duas in margine postico ferens.

Long. (in satiato) corporis 20 millim.; rostri 1 millim., scuti occipitalis 2.5 millim.; lat. corporis 11 millim., scuti occipitalis 2.25 millim.

*Hab.* GUATEMALA, Retalhuleu (*Stoll*).