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Remarkable intensity of ticks (Ixodida: Ixodidae) on a Western Giant Toad, *Peltophryne fustiger* (Anura: Bufonidae)

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Abstract: An adult female of *Peltophryne fustiger* (Schwartz, 1960) was found in a suburban secondary semideciduous forest at San Antonio de los Baños, Artemisa province, Cuba, parasitised by 875 ticks (*Amblyomma dissimile* Koch, 1844), of which 14 were males, 12 females, 699 nymphs and 150 larvae. At least in Cuba, this is the highest number of ticks recorded for an individual anuran. The cause of this extraordinary case seems to be the severe anthropic alteration of the habitat.
Key words: Ixodoidea, *Amblyomma dissimile*, ectoparasite, Anura, *Peltophryne fustiger*, West Indies, Cuba.

Extraordinaria intensidad de garrapatas (Ixodida: Ixodidae) en un sapo gigante cubano, *Peltophryne fustiger* (Anura: Bufonidae)
Resumen: Se registra el caso de una hembra adulta del sapo *Peltophryne fustiger* (Schwartz, 1960) hallada en un bosque semideciduo secundario en la periferia del pueblo de San Antonio de los Baños, provincia Artemisa, Cuba, que estaba parasitada por 875 garrapatas (*Amblyomma dissimile* Koch, 1844), de las que 14 eran machos, 12 hembras, 699 ninfas y 150 larvas. Al menos en Cuba, esta es la máxima cantidad de garrapatas halladas sobre un solo anuro. La causa de este sorprendente caso pudiera ser la severa alteración antrópica del hábitat.
Palabras clave: Ixodoidea, *Amblyomma dissimile*, ectoparásito, Anura, *Peltophryne fustiger*, Antillas, Cuba.

Neotropical amphibians (frogs and toads) are frequently parasitized by ticks, mainly belonging to the genus *Amblyomma* (Barros-Battesti *et al*., 2006). For the Cuban toads, at least three species of this taxon have been recorded, although the identity of some species is with doubt (Cerny, 1966); nevertheless, according with published data (Cerny, 1966, 1969; Armas, 2007: fig. 347; González Alonso, 2007: fig. 419), and my personal observations, no more than 50 ticks per toad are often found.

On February 10, 2018, at 11:23 h, under a stone in the suburban secondary semideciduous forest near Ariguanabo River (22º 53' N – 82º 30' O; 180 m o.s.l.; Fig. 1), San Antonio de los Baños, Artemisa province, Cuba, was found a female of the Western Giant Toad, *Peltophryne fustiger* (Schwartz, 1960) (total length 150 mm, weight 330 g), which was intensely parasitized by ticks (Fig. 2 B-D). It was moved to the laboratory, where its ectoparasites were gently removed during the following 48 hours (also, 31 nymphs and larvae were obtained near it, in the container bottom, which was conditioned with humid dead leaves).

In total, 875 ticks were removed from the toad: 14 males, 12 females, 699 nymphs and 150 larvae, which were identified as *Amblyomma dissimile* Koch, 1844 (Fig. 3 A-F), a species previously recorded for *P. fustiger* by Cerny (1966, 1969). This is the highest amount of ticks recorded for a single Cuban anuran. Respect to the possible cause of this astonished case, it might be a consequence of the severe anthropic alteration of the habitat, because this is a suburban area highly affected by human activities (Fig. 1, 2 A).

Two days after the ticks were totally removed, the toad skin showed a well aspect, mainly on the flanks, although the individual showed signs of impoverishment. After five days in captivity, it was returned to its natural habitat.

All the obtained ticks are deposited in the acarological collection of the Institute of Ecology and Systematics (IES), Havana.

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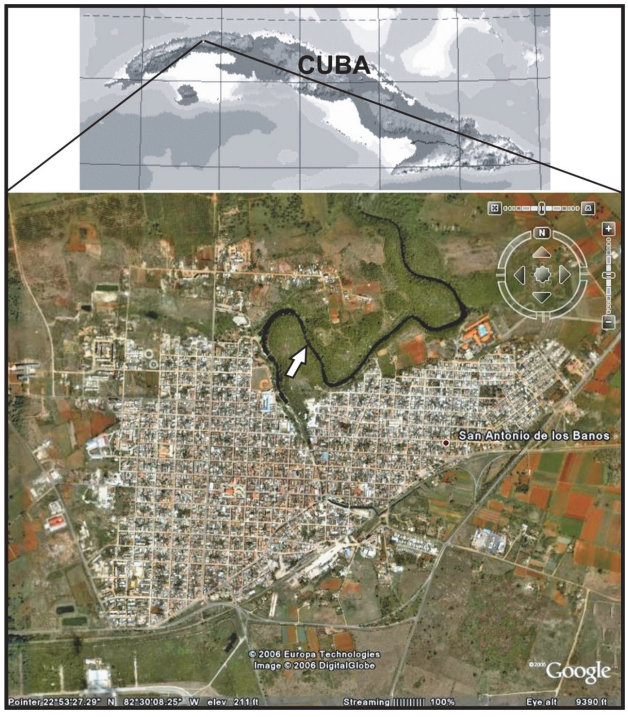


Fig. 1. Place (arrow) in which was collected the female of *Peltophryne fustiger* herein recorded.

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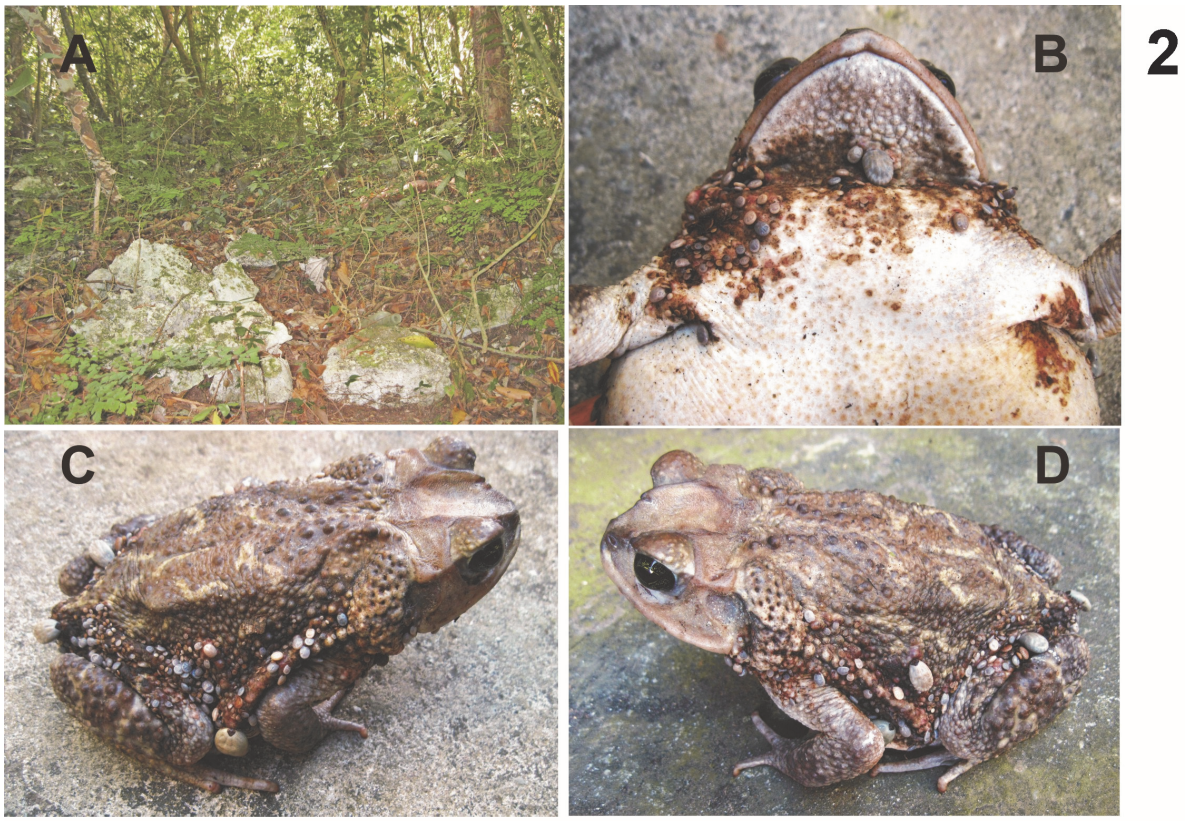
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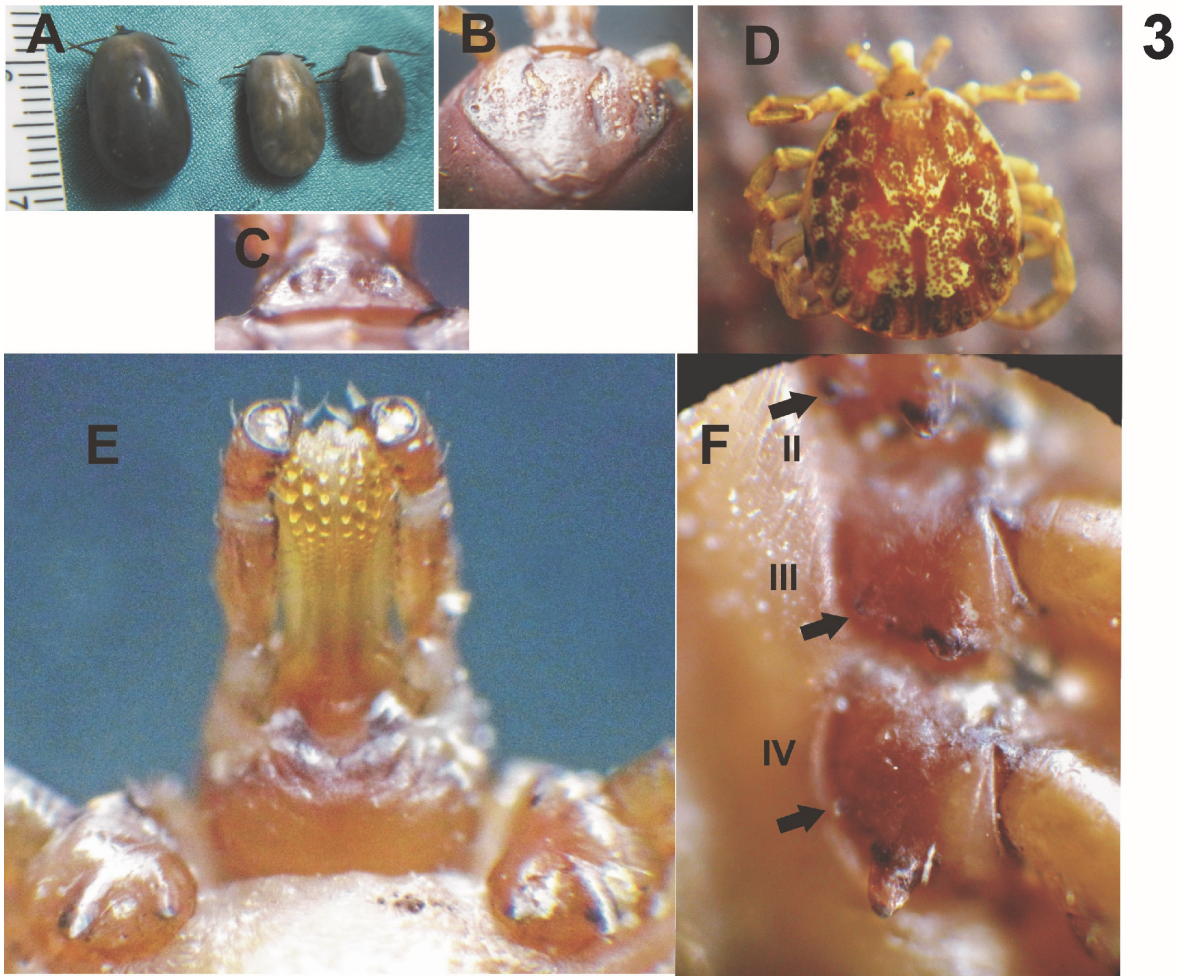
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Fig. 2. Female of *Peltophryne fustiger* intensely parasitized by ticks (*Amblyomma dissimile*) in San Antonio de los Baños, Artemisa, Cuba. **A**, Habitat in which it was collected. **B-D**, the specimen in the laboratory in ventral aspect (**B**), right (**C**) and left (**D**) dorsolateral aspects. **Fig. 3.** *Amblyomma dissimile* collected on a female *Peltophryne fustiger* in San Antonio de los Baños, Cuba. **A-C**, females: **A**, the three largest replete specimens (scale is in millimetres); **B**, scutum; **C**, porous areas. **D-F**, male: **D**, dorsal aspect; **E**, capitulum, ventral aspect; **F**, leg trochanters III-V (arrow