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**Hirstiella** sp. (Acari: Pterygosomatidae) infestation in green iguana (*Iguana iguana*) from Urmia, Iran

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Reptiles, such as green iguana (*Iguana iguana*), have become increasingly common domestic pets worldwide (Rataj et al. 2011). Ectoparasites, chiefly mites, are the main cause of dermatological lesions in reptiles (Terrell and Stacy 2007). Trombiculidae, Macronyssidae and Pterygosomatidae are the important mite families infesting reptiles (Moriello 1995).

**Hirstiella** sp. (Acari: Prostigmata: Pterygosomatidae) is a small red mite of reptile’s skin. This mite can be making irritation, producing a pruritic response in hosts. Clinical signs may include anorexia, depression, lethargy, dysecdysis and severe ulcerative dermatitis (Stahl 2003). Mite infestations are generally sufficiently extensive so they can be observed grossly, although low infestations are difficult to detect (Moriello 1995). Diagnosis is based to microscopic examination according to identification keys (Hopmann and Barron 2007). Ivermectin were used for treatment of infestation (Gazyagci et al. 2011). This study was designed to document the occurrence of a green iguana, *Iguana iguana*, infested with mite in Urmia, Iran.

A green iguana with a roughly one year age, 16 cm snout-rent length and 40 cm snout-tail length was referred to the teaching hospital of Faculty of Veterinary Medicine, Urmia University. The iguana was suffering from malnutrition due to lack of owner's knowledge on nourishing and nursing. All of body surface was inspected for ectoparasites. Mite specimens were detected by cleaning of the skin scrapes in lactophenol and then mounted in Hoyer's medium on microscope slides (Cunliffe 1949; Parades-Leon and Morales-Maracara 2009). Collected mites were identified as **Hirstiella** sp. (Fig. 1) by morphological characteristics presenting in the identification key of Baker (1998). In clinical examination, pruritus, erythema, darkness, itching, and a number of red mites were observed.

The mites of Pterygosomatidae live on reptiles (Stahl 2003). The nine genera of mite including Cyclurobia, Geckobia, Geckobiella, Hirstiella, Isoderma, Pterygosoma, Scaphotrix, Equisistlana, and Zonurobia reported to infest reptiles (Gazyagci et al. 2011). Eleven species of **Hirstiella** can be infest the lizards belong to families as Gekkonidae, Iguanidae, Phrynosomatidae, and Crotaphytidae (Rataj et al. 2011). Green iguanas may present with red mites most likely of the genus **Hirstiella** (Stahl 1998). **Hirstiella** sp. has been reported in lizards from Mexico (Cunliffe 1949; Parades-Leon and Morales-Maracara 2009), U.S.A (Newel and Ryckman 1964), and green iguana from Turkey.
Hirstiella diolii was reported on different species of Australian iguana (Walter and Shaw 2002). Hirstiella bakeri (Cunliffe, 1952), H. otophila (Hunter and Loomis, 1966), H. pelaesi (Cunliffe, 1949), H. pyriformis (Newell and Ryckman, 1964), and H. trombidiformis (Baker, 1998) have been recorded from Mexico (Parades-Leon and Morales-Maracara 2009). Species of Hirstiella may be associated with disease and debilitation of captive reptiles via blood loss, and skin lesions as well as can transmit the parasitic disease agents (Telford 1971). Cunliffe (1949) described Hirstiella pelaesi and intimated that it might be the vector of a disease of reptiles. Hirstiella sp. might be a potential vector of Plasmodium mexicanum (Telford 1971). The transmission of haemogregarine protozoan was described by Newell and Ryckman (1964) in California. The present study is the first report of a green iguana infested with Hirstiella sp., as a new mite genus recorded from Iran.

Figure 1. Some features of Hirstiella sp. – A. Full view of ventral state; B. Anterior view; C. Posterior view.

REFERENCES


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