

# PRELIMINARY REPORT ON THE SURVEY OF THE HEALTH STATUS OF THE SPINY-TAILED LIZARD (*UROMASTYX SP*) IN WRSAN FARM, AL AJBAN, ABU DHABI, UAE

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There are two species of spiny-tailed lizard, called 'dhub' locally, that are present in the UAE, namely, the Egyptian spiny-tailed lizard (*Uromastyx aegyptia microlepis*) and Leptien's spiny-tailed lizard (*Uromastyx leptieni*). The two species are very similar and Leptien's spiny-tailed lizard was only recognized as being a distinct species in 2000. The Leptien's spiny-tailed lizard is believed to be endemic to the UAE.

Spiny-tailed lizards are large ground dwelling herbivorous lizards found on gravel terrain and inter-dune compact soils throughout the UAE. They can grow up to 65cm long and usually live in loose colonies. There is rarely one burrow on its own but usually several, at some 20 to 50 m distance from its neighbour. Despite their dragon-like appearance they are very placid animals that prefer to flee rather than enter into conflict. Their favoured plants include the coarse desert grasses as well as the evergreen herbs, with arthropods making up less than 1% of their diet. They have a very low metabolism that allows them to not only make the most of a low calorie diet, but to also go several weeks without eating anything. They rarely need to drink as they extract most of their water from their food. Excessive salts are excreted through a salt gland near its eyes.

The number of spiny-tailed lizard is believed to be under threat because of the development of many areas where they live. It is protected by law in the UAE, and trade is banned under the Convention on International Trade in Endangered Species of Flora and Fauna (CITES).

There is very little information available on the health status of this species in the wild. In this regard a study was conducted to determine the health status of the spiny-tailed lizard population in Wrsan Farm, Al Ajban, Abu Dhabi. This is a preliminary report of that study. The lizards were caught manually after 8:00 in the morning when they came out from their burrows to bask under the sun. They were anaesthetized with isoflurane and oxygen. While under anaesthesia the following procedures were performed: physical examination, radiographical examination, measurement of body weight and total length, collection of blood samples for haematology and serum chemistry analysis and collection of oro-pharyngeal and cloacal swabs for microbiological and cytological examinations. Faecal samples were collected for parasitological examination. Each individual animal was photographed and marked with an identification number on its back. It was then released back near its capture site late in the afternoon or the next morning.

A total of 90 spiny-tailed lizards comprising of 61 males and 29 females were included in this study. The body weights were between 328 – 2146g for males and 418 – 1082g for females. The total lengths were between 36.2 – 71cm for males and 39.7 – 54.8cm for females.

The majority of the spiny-tailed lizards examined were clinically normal. Some abnormalities observed in few animals included extreme emaciation (2), osteomyelitis and/or arthritis (8), healed fractures (5), fresh bite wounds (5), deformed or missing tail tips (5), deformed or missing digits (4), deformed or missing claws (8) and deformed upper jaw (1).

Out of 90 blood films examined, 59 (65.5%) were found positive with *Haemoproteus sp.* The degree of parasitemia was between 1 – 10%. Between 20 to 25% of the spiny-tailed lizards examined were sub-adults as evidenced by the incomplete ossification of their long bones. Organisms isolated from oropharyngeal swabs included *Escherichia coli*, *Pseudomonas sp.*, *Staphylococcus epidermidis*, non-haemolytic *Streptococcus*, Beta-haemolytic *Staphylococcus*, *Providencia sp* and *Neisseria sp.* Organisms isolated from cloacal swabs included *Escherichia coli*, *Proteus sp.*, Non-haemolytic *Staphylococcus*, *Streptococcus faecalis*, *Klebsiella sp.*, *Salmonella sp.*, *Pseudomonas sp.*, *Providencia sp.*, *Acinetobacter*, *Enterobacter* and *Serratia sp.*

The full report of this study will be published in due time.

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Figure 1. Spiny-tailed lizard (*Uromastyx sp*) or 'dhub' lizard basking under the sun. (© J. Naldo)



Figure 2. The body weights of the Spiny-tailed lizards (*Uromastyx sp*) were between 328 – 2146g for males and 418 – 1082g for females. (© J. Naldo)



Figure 3. A Spiny-tailed lizard (*Uromastyx sp*) being prepared for radiographical examination. The animal is anaesthetized with isoflurane and oxygen. (© J. Naldo)



Figure 4. Blood collection from the ventral tail vein for haematology and chemistry analysis. (© J. Naldo)