

The status of the two Toad-headed Agamas, *Phrynocephalus arabicus* (Anderson, 1894) and *P. maculatus* (Anderson, 1872), in Kuwait

(Sauria: Agamidae)

Abdul-Rahman Al-Sirhan, Gary Brown

Abstract. This paper clarifies the status of the two species of *Phrynocephalus* in Kuwait, *P. arabicus* (Anderson, 1894) and *P. maculatus* (Anderson, 1872), about which there appears to have been substantial confusion in the past. Both species are now known to occur in this country, with *P. arabicus* being widespread and locally common in sandy desert areas, but *P. maculatus* apparently restricted to sabkha and other coastal habitats (including islands). These findings correspond with the known habitat preferences of both species from other parts of the eastern Arabian Peninsula.

Key words. Distribution, habitat preference, historical records, Middle East, reptile.

Introduction

To date, only one species of *Phrynocephalus*, *P. maculatus* (Anderson, 1872), has been published as occurring in Kuwait. However, LEVITON et al. (1992) suspected that *P. arabicus* (Anderson, 1894) should also occur in the country, as it is widely distributed in the Arabian Peninsula, including the Al-Hasa District of Saudi Arabia which is situated south of Kuwait between Riyadh and Qatar. These authors also wrote that *P. arabicus* is known from the Mesopotamian Plain in the vicinity of Ahwaz, Iran (ca. 80 km east of the Iraqi border), but has not been recorded elsewhere in Iran, nor from Iraq. ANDERSON (1999) re-examined the single specimen from the Mesopotamian Plain, and concurred that it was indeed *P. arabicus*. According to WITTENBERG (1992) and DISI et al. (2001), *P. arabicus* has also been recorded from a few localities in south-eastern Jordan, which represents the westernmost limits of its distribution.

What makes the records of *P. maculatus* from Kuwait intriguing is that the observations are usually attributed to inland desert areas (e.g. CLAYTON 1983), although studies from nearby countries (e.g. ARNOLD 1980, GARDNER 2005, ROSS 1989) have shown sabkha (often coastal) and rocky environments to be the typical habitat of *P. maculatus*, with *P. arabicus* found mainly in sandy desert habitats.

ANDERSON (1999) discussed two subspecies of *Phrynocephalus maculatus* in the wider region, but concluded that the morphological characters separating them were not consistent. *P. maculatus maculatus* occurs on the Central Plateau of Iran, at elevations between 500 and 3000 m, east through southern Afghanistan and Baluchistan, and extending into Nushki, Pakistan. The nominate subspecies *P. maculatus maculatus* was also listed for Iraq by SMITH