

A new locality for *Tadarida teniotis* (Rafinesque, 1814) (Mammalia, Chiroptera, Molossidae) in Algeria

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Abstract. Free tailed bat *Tadarida teniotis* has so far been recorded only from two Algerian localities. Based on voucher specimen, authors reports in this note an additional new distribution record of the species. The sighting represent the southernmost site for the species and enlarge to the Sahara the distribution of this Molossidae.

Keywords: *Tadarida teniotis*, Distribution, Tamanrasset, Algeria.

Molossidae family consists of 13 genera and 89 species, belonging to the order Microchiroptera (Simmons, 2005, Shah et al., 2014). These are small or medium sized insectivorous bats with strong tail projecting beyond the interfemoral membrane and prominently wrinkled lip (Ibanez & Arlettaz, 2013). They are distributed throughout old World and New World tropics (Aulagnier et al., 2008). In Algeria, genus *Tadarida* is represented by the two species *Tadarida aegyptiaca* and *Tadarida teniotis*. The Egyptian free-tailed bat, *Tadarida aegyptiaca* (E. Geoffroy, 1818) differs from the European free-tailed bat, *Tadarida teniotis* (Rafinesque, 1814) in having a distinctly smaller forearm (46.0-52.3 vs 58.4-63.9 mm) and possessing ears separated on the forehead (Shah et al., 2014).

Tadarida teniotis, as for the most of Algerian bat fauna, has an ecology and distribution area which remains relatively unknown (Bendjeddou et al., 2014). The species was reported 60 years ago in the arid desert (Dorst & Petter, 1959). Then, recently, it was sighted in northern Algeria at Lakhdaria and Tighanimine (Kock & Nader, 1984) and subsequently reported in Meniaâ at 500 km from Algiers southwards (Gaisler & Kowalski, 1986).

The morphology of the European free-tailed bat was described in Hoalth, 2009 and Aulagnier et al., 2011. Morphological characters are large, forward-pointing ears that curl in at the edges and a long, wrinkled muzzle. Another character is to possess a long tail which, unlike many other bats, extends well beyond the uropatagium. The fur is long, particularly on the throat, and is typically slate-grey on the upperparts and paler on the underparts. The wings are also greyish-brown to black in color and are very long and narrow, giving it great agility and the ability to fly long distances in an energy efficient way (Bayefsky-Anand et al., 2008). This species favors open habitats, such as grasslands and shrub lands, from sea level up to 2,300 meters. It roosts in fissures and hollows in rocky outcrops, quarries and sea cliffs. It is fairly common in some urban areas and sometimes roosts in artificial structures such as bridges, water

towers, cathedrals and other tall buildings (Mitchell-Jones et al., 1999; Aulagnier et al., 2008; Ibañez and Arlettaz., 2013).

Tamanrasset is a famous tourist area located in Hoggar region (southern Algerian Sahara) at 2000 Km from Algiers (Figure 1). It's located at 1400 m above the sea and has a temperate and super-dry climate with temperature ranging between 12° and 40° C (Hamdi, 2013). During a preliminary field exploration (28 January 2015), a weakened specimen was collected from a house' crack at 4 km northeast of the city center of Tamanrasset with coordinates 22°47' 87" N e 5°31'15" E at an altitude of 1372 m. The collected *T. teniotis* is a male (Figure 2) and was identified according to the criteria described in Dietz and von Helversen (2007)



Fig. 1 – Distribution of *Tadarida teniotis* in Algeria. Black dots are old records and the red refer to the present finding at Tamanrasset.



Fig. 2 – Ventral view of the *Tadarida teniotis* (photo B. Bakhouché).

and Dietz et al. (2009), with forearm length of 58,52 mm and a weight of 20,5 g. The third finger measures 105,72 mm and the fifth is 56,50 mm.

This sighting challenges the species' distribution area it's of particular importance in regard to enlarge the distributional range of the species to the south and opens to a new series of researches in Sahara bat distribution. Future studies will aim to detect roosts and assess of *T. teniotis* and its population size.

RIASSUNTO

Nuova località per *Tadarida teniotis* (Rafinesque, 1814) (Mammalia, Chiroptera, Molossidae) in Algeria

Il Molosso di Cestoni *Tadarida teniotis* (Rafinesque, 1814) è conosciuto ad ora per sole due località del settentrione dell'Algeria. Qui si riporta la segnalazione più meridionale dell'areale della specie, presso Tamanrasset (coordinate 22°47' 87" N e 5°31'15" E), allargando la presenza al territorio sahariano.

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