
First record of the African green bee-eater *Merops viridissimus* (Swainson, 1837) in Southern Algeria

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Abstract

First record of the African green bee-eater Merops viridissimus (Swainson, 1837) in Southern Algeria. On November 4th, 2023, in the Tawendert region (20° 38' N, 2° 45' E) of Algeria, near the border with Mali, members of the the Algerian Wildlife Watchers Association (AWWA) observed and photographed two individuals of the African green bee-eater *Merops viridissimus* perched on an acacia tree. This observation marks the first recorded sighting of this species in Algeria and in the Maghreb region as a whole.

Key words: New record, African green bee-eater, *Merops viridissimus*, Algeria, Sahara

Resumen

Primer registro de abejaruco esmeralda africano Merops viridissimus (Swainson, 1837) en el sur de Argelia. El 4 de noviembre de 2023, en la región de Tawendert (20° 38' N, 2° 5' E), cerca de la frontera con Mali, los miembros de AWWA tuvieron la suerte de observar y fotografiar dos ejemplares de abejaruco esmeralda africano *Merops viridissimus* posados en una acacia. Esta observación supone el primer avistamiento de esta especie registrado en Argelia y en el conjunto de la región del Magreb.

Palabras clave: Nuevo registro, Abejaruco verde africano, *Merops viridissimus*, Argelia, Sáhara

Resum

Primer registre d'abellerol maragda africà Merops viridissimus (Swainson, 1837) al sud d'Algèria. El 4 de novembre de 2023, a la regió de Tawendert (20° 38' N, 2° 45' E), prop de la frontera amb Mali, els membres d'AWWA van tenir la sort d'observar i fotografiar dos exemplars d'abellerol maragda africà *Merops viridissimus* posats en una acàcia. És la primera observació d'aquesta espècie registrada a Algèria i al conjunt de la regió del Magrib.

Paraules clau: Nou registre, Abellerol maragda africà, *Merops viridissimus*, Algèria, Sàhara

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Introduction

Bee-eaters, classified within the Meropidae family of the Coraciiformes order, which comprises six families (Gill et al., 2023), encompass three genera and a recognized count of 31 species, primarily distributed across Africa, Europe, and Asia (Ali and Asokan, 2015; Gill et al., 2023). Known for their diet consisting primarily of flying insects, bee-eaters exhibit foraging behaviour by darting out from open perches. Among their prey, they commonly consume Hymenoptera, such as ants, small halictine bees, ichneumons, many species of honeybees, and various families of wasps, in addition to numerous beetles, dragonflies, termites, Microlepidoptera, butterflies, and various small bugs and flies (Fry and Fry, 1992; Wasnik et al., 2014).

The green bee-eater *Merops orientalis* is characterized by its vibrant plumage, slender body, and elongated central tail feathers. It is prevalent in Africa and Asia, with additional species found in southern Europe, Australia, and New Guinea (Wasnik et al., 2014). It has been divided into three separate species: African (*M. viridissimus*), Arabian (*M. cyanophrys*), and Asian (*M. orientalis*) bee-eaters. The first is distinguished from the others by its substantial differences in morphology and vocalizations (Fry et al., 2020; Gill et al., 2023). The range of the African green bee-eater spans the dry woodland zone in Africa, predominantly between 12° and 16°N, and it is occasionally found south of 10°N or north of 18°N, with primary breeding latitudes between 15° and 17°N. After breeding, some individuals disperse into regions such as the Adrar des Ifoghas in Mali (Fry and Fry, 1992).

In Algeria, the order Coraciiformes is represented by three families: Meropidae, Coraciidae, and Alcedinidae. The family Meropidae includes three species of bee-eaters: the European bee-eater *Merops apiaster*, the blue-cheeked bee-eater *Merops persicus*, and the white-throated bee-eater *Merops albicollis*. Two species, the European bee-eater and the blue-cheeked bee-eater, are known to nest in Algeria (Isenmann and Moali, 2000; Boulaouad et al., 2022). The third species was observed twice, in 2021 and 2022, in the southern part of Algeria (Boulaouad et al., 2022, 2023a, 2024).

Despite appearing on several distribution maps as a species found in Algeria (Borrow and Demey, 2014; Kirwan et al., 2022), there has been no documentation to date to confirm the presence of the African bee-eater in this country. Here we present the first recorded sighting of the African green bee-eater *Merops viridissimus* in Algeria.

Material and methods

From November 1st to November 10th, 2022, fieldwork was undertaken in the southern-most region of Algeria (fig. 1) as part of a bird-watching expedition. The study was undertaken within the province of Guezzam (20° 38' N, 2° 45' E), near Tawendert, a village in the

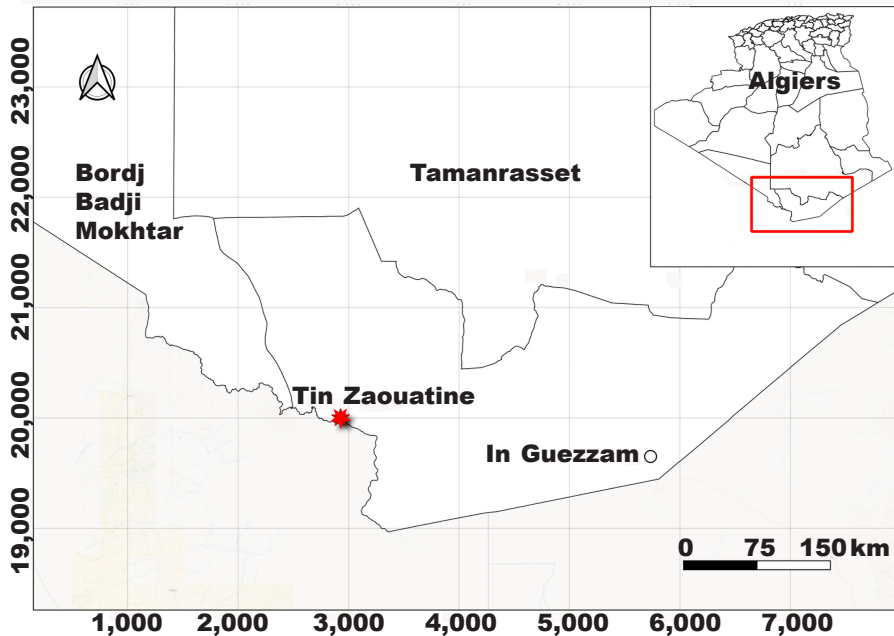


Fig. 1. Geographic location of the study region.

Fig. 1. Localización geográfica de la región de estudio.

municipality of Tinzaouatine. It is located 500 km southwest of Tamanrasset, and also falls within the boundaries of the Ahaggar National Park.

Ahaggar National Park is the largest mountain range in the southernmost part of Algeria. It is nestled in the heart of the Sahara Desert, the largest desert in the world. Covering an area of 450,000 km², Ahaggar connects the Tanazrouft Desert to the west and the N'Adjers Tassili to the east. It extends from about In Salah to the borders shared with Mali and Niger, located between 23°N and 5°E. Recognizing its ecological importance, the Ahaggar massif was granted national park status on November 3rd, 1987, according to Decree No. 87-232 from the Ministry of Culture and Arts (Algeria).

Results and discussion

On November 4th, 2023, in the Tawendert region (20° 38' N, 2° 45' E), close to the border of Mali, members of AWWA (the Algerian Wildlife Watchers Association) observed and photographed two individuals of the fourth bee-eater species for Algeria, the African green bee-eater *Merops viridissimus*. They were observed perched on an acacia tree (fig. 2). The site is characterized by the presence of shrubs such as *Balanites aegyptiaca*, *Salvadora persica*, and acacia trees.

Both individuals were identified as adult African green bee-eaters, distinguished by being entirely green with very long tail streamers, black mask, and a slender black gorget. In flight, they displayed rufous flight feathers both above and below, along with a black trailing edge (Borrow and Demey, 2014).



Fig. 2. An adult individual of *Merops viridissimus* perched on an acacia tree alongside *Spiloptila clamans*.

Fig. 2. Un exemplar adulto de *Merops viridissimus* posado en una acacia junto a *Spiloptila clamans*.

This observation is the first documented sighting of the African green bee-eater in Algeria, making it the fourth species of the Meropidae family recorded in the country (Ledant et al., 1981; Isenmann and Moali, 2000; Boulaouad et al., 2022, 2023a). The African green bee-eater lives in the dry woodlands of Africa, from Senegal to Darfur. It has mainly been seen in specific areas during the breeding season, such as in Mali, and it sometimes moves to the Adrar des Ifoghas region after breeding (Fry and Fry, 1992). The distribution of subspecies of the African green bee-eater *Merops viridissimus* varies across regions. The subspecies *M. v. viridissimus* (Swainson, 1837) is found from Senegal to central Ethiopia. The subspecies *M. v. flavoviridis* (Niethammer, 1955) is distributed from Chad to eastern Sudan, and the subspecies *M. v. cleopatra* (Nicoll, 1910) is primarily located in the Nile Valley (Egypt) to northern Sudan (Gill et al., 2023).

Throughout the expedition, we also documented additional avian species breeding in the Sahara: the cricket warbler *Spiloptila clamans*, the blue-naped mousebird *Urocolius macrourus*, the Northern grey-headed sparrow *Passer griseus*, the African grey woodpecker *Dendropicos goertae*, the chestnut-bellied starling *Lamprolornis pulcher* and the African collared dove *Streptopelia roseogrisea*.

Over the last five years, several other sub-Saharan species have been observed and reported in the same southernmost region of Algeria, these including *Spiloptila clamans*,

Urocolius macrourus, *Passer griseus*, *Dendropicos goertae*, *Lamprotornis pulcher* and *Streptopelia roseogrisea* (Boulaouad et al., 2022, 2023a, 2023b, 2024; Soukkou et al., 2023).

This new addition presented here is the result of increased prospecting efforts in the extreme south of Algeria, within the Afrotropical realm. The increase in research on animal diversity herein has led to a significant increase in knowledge of Algerian ornithology. The present finding emphasizes the beneficial relevance and importance of increasing research in the area so as to expand our knowledge of the fauna existing in this vast southern region.

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