Diversity and distribution of freshwater amphipods from Tunisia

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ABSTRACT

Despite the vast surface of North Africa, the freshwater Gammaridae are still poorly known and only 21 species have been described until now (Rewicz et al., 2014). They belong to 3 genera: Echinogammarus(11 species), Gammarus(8 species), and Chaetogammarus(1 species). We can add to this list a brackish water genera that can be found in freshwaters close to the sea, *Rhipidogammarus* (1 species). The Tunisian freshwaters are known to harbor only 7 species: Echinogammarus afer Stock, 1974, Echinogammarus dactylus G. Karaman, 1987, Echinogammarus simoni (Chevreux, 1894), Echinogammarus pungens (Milne Edwards, 1840), Echinogammarus tacapensis (Chevreux & Gauthier, 1924), Gammarus gauthieri (S. Karaman, 1935) and Rhipidogammarus rhipidiophorus (Catta, 1878). To further document our knowledge of the freshwater amphipods from Tunisia, we sampled more than 60 sites (streams and springs) widely distributed in all regions of Tunisia. In this study, most of the previously reported species have been found except for E. tacapensis and E. dactylus which were not observed. However, our current surveys have allowed us to find at least 4 new species records for Tunisia, including at least three new species of *Echinogammarus*, and a new one for Tunisia: Echinogammarus haraktis Piscart, Merzoug et Hafid 2013, recently described in Algeria. Moreover, the sampling of these 9 species from the north to the south of Tunisia showed a heterogeneity in the distribution of species. Most of them are restricted to one region of Tunisia while only three species: E. simoni, E. pungens and E. afer were more widely recorded in rivers and water sources throughout Tunisia.

KEY WORDS

North Africa; geographical distribution; freshwater Gammaridae.

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(1 species). The Tunisian freshwaters are known to harbor only 7 species: *Echinogammarus afer*, *Echinogammarus dactylus*, *Echinogammarus simoni*, *Echinogammarus pungens*, *Echinogammarus tacapensis*, *Gammarus gauthieri* and *Rhipidogammarus rhipidiophorus*.

To further document our knowledge of the freshwater amphipods from Tunisia, we sampled more

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than 60 sites (streams and springs) widely distributed in all regions of Tunisia. In this study, most of the the previously reported species have been found except for *E. tacapensis* and *E. dactylus* were not observed. However, our current survey have allowed us to find 4 new species for Tunisia, including at least three new species of *Echinogammarus* for science: and a new one for Tunisia: *E. haraktis*, recently described in Algeria (Piscart et al., 2013). Moreover, the sampling of these 9 species from the North to the South of Tunisia showed a heterogeneity in the distribution of species. Most of them are restricted to one region of Tunisia while only three species: *E. simoni*, *E. pungens* and *E. afer*

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