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***Hyaella cenotensis*, a new species of Hyaellidae (Crustacea: Amphipoda) from the Yucatán Peninsula, Mexico**

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Abstract

In this study the first blind species of *Hyaella* for Mexico is described; it is the second in the genus to be recorded there. The new species is closer to the eyeless species: *H. anophthalma* Ruffo, 1957, *H. muerta* Baldinger, Shepard & Threlhoff, 2000, *H. caeca* Pereira, 1989, *H. spelaea* Bueno & Cardoso, 2011 in Cardoso *et al.* 2011, *H. imbya* Rodrigues & Bueno, 2012 in Rodrigues *et al.* 2012, but with no curved seta at the inner ramus of uropod 1, antennae 1 shorter than antennae 2, no apical setae on the telson and a characteristic dorsoposterior carina and three pappose setae on the inner plate of maxilla 1. The morphological intraspecific variations that can be found in this genus are discussed.

Key words: Crustacea, Amphipoda, Hyaellidae, *Hyaella*, taxonomy, new species, freshwater amphipod, cenote, Quintana Roo

Introduction

In Mexico, 30 species of epicontinental amphipods, belonging to 7 families, (Bogidiellidae, Hadziidae, Aoridae, Ischyroceridae, Melitidae, Hyalidae and Hyaellidae) have been registered to date. Almost all are hypogean, and the only species really epigean is *Hyaella azteca* (Saussure, 1858) (Reddell 1981; Rocha *et al.* 2008; Trujillo-Pisanty *et al.* 2010). In the genus *Hyaella*, 57 species have been described so far (Bastos-Pereira & Bueno 2013), and although it can be considered a highly diversified genus, in Mexico only one species has been recorded: *Hyaella azteca* Saussure, a freshwater species described from Veracruz State, southern Mexico (Saussure, 1858). *Hyaella azteca* has also been recorded from northern Mexico (Cole 1984), its central region (Saussure 1858; Alcocer *et al.* 1998; Alcocer *et al.* 2002; Barba & Sánchez 2007) and the southeast (Strecker 2006; Montalvo-Urgel *et al.* 2010; Hernández *et al.* 2010). Creaser (1936) was the first author to record it from cenotes (sinkholes), which are very common habitats in south-eastern Mexico.

Five species of *Hyaella* with no eyes have already been described: *H. anophthalma* Ruffo, 1957 from Venezuela, *H. muerta* Baldinger, Shepard & Threlhoff, 2000 from the U.S.A., and *H. caeca* Pereira, 1989, *H. spelaea* Bueno & Cardoso, 2011, in Cardoso, Bueno & Ferreira, 2011 and *H. imbya* Rodrigues & Bueno, 2012 from Brazil. In this paper we describe the second species found so far in Mexico and its first with no eyes. The specimens were collected in Cenote Aktun-Ha, Quintana Roo, Mexico (20°16.48'N, 87°29.20'W) in April 2008 on dense algal mats. Samples were collected manually at a depth of 1–2 m using snorkeling. The classification of upper level taxa followed Lowry & Myers (2013). The specimens collected are deposited in the National Collection of Crustaceans, Instituto de Biología of the Universidad Nacional Autónoma de México (UNAM). Total length was measured from tip of the head to the tip of the telson. The terminology for setae follows Zimmer *et al.* (2009).

- more than 17 articles. *H. imbya* (Brazil)
- Inner ramus of uropod 1 without a long curved seta; antennae 1 shorter than half the body length, flagellum with less than 18 articles. 3
- 3. Antenna 1 longer than antenna 2; sternal gills on pereonites 3–7. *H. muerta* (U.S.A.)
- Antenna 1 shorter than antenna 2; sternal gills on pereonites 2–7. 4
- 4. Telson with apical setae; gnathopod 1 propodus without comb scales. *H. caeca* (Brazil)
- Telson without apical setae; gnathopod 1 propodus with comb scales. 5
- 5. Pleonites 1 and 2 without dorsoposterior carina; lower lip rounded; maxilla 1, inner plate with two apical setae.
- *H. anophthalma* (Venezuela)
- Pleonites 1 and 2 with dorsoposterior carina; lower lip subtriangular; maxilla 1, inner plate with 3 apical setae
- *H. cenotensis* (Mexico)

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