



## ***Ampelisca mississippiana*: a new species (Crustacea: Amphipoda: Gammaridea) from the Mississippi Canyon (Northern Gulf of Mexico)**

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### **Abstract**

A new ampeliscid species (Amphipoda, Gammaridea) was recovered in high densities from a depth of about 480 m at the Mississippi Canyon (28 32' N, 89 49' W). *Ampelisca mississippiana* is described and illustrated based on specimens collected from the head of the canyon, where the species formed an ampeliscid mat with average densities of 12,000 ind. m<sup>-2</sup>. *Ampelisca mississippiana* resembles *A. pugetica* Stimpson, 1864, and *A. mexicana* Barnard, 1954a, but differs in the shape of the head, absence of corneal lenses, relative lengths of antennae 1 and 2, shape of the segments of pereopods 7, and shape of the carina of the urosome. The new species also resembles *Ampelisca uncinata* Chevreux, 1887, but differs in the shape of the head, the dorsal carina of pleon segment 4, features of some segments of pereopod 7, the second uropod and the mouthparts.

**Key words:** *Ampelisca*, Amphipoda, Mississippi Canyon

### **Introduction**

The genus *Ampelisca* is one of the most important and most diverse benthic amphipods (Dauvin and Bellan Santini, 1988). It comprises about 153 species (Kaïm- Malka, 2000). They are commonly found on muddy and sandy bottoms from subtidal to intermediate depths on continental slopes (Barnard, 1960).

The Ampeliscidae from the northwestern Atlantic Ocean including the Gulf of Mexico and the Caribbean Sea were examined previously by Barnard (1954a), Mills (1963, 1964, 1967b, and 1971). Twenty-four ampeliscid species were described or re-described from different depths from this geographic area. The taxonomy of the Atlantic ampeliscids is very confusing and far from satisfactory (Reid, 1951). The systematics of genus *Ampelisca* in general is badly confused because of many poor illustrations and descriptions (Barnard, 1960). Many species are known from small numbers of animals, sometimes in a poor state of preservation (Kaïm-Malka, 2000).

During sampling on summer cruises in 2000 to 2004, we found large numbers of unidentified ampeliscids at the head of the Mississippi Canyon, northern Gulf of Mexico. This paper describes these amphipods as a new species. We compare it to *A. pugetica*, *A. uncinata* and other similar species. Notes on its ecology are provided.

### **Materials and methods**

Specimens were obtained from sediment samples collected from the R/V *Gyre* using a 0.2 m<sup>2</sup> GOMEX or Gray-O'Hara box core (Boland and Rowe 1991). All samples were taken at the head of the Canyon, desig-