Variation in the carapace ornamentation of a new species of Pseudocypris Daday, 1910 (Crustacea, Ostracoda) from South Africa

AGATA SZWARC¹, KOEN MARTENS^{2,3}, LIZAVETA KARDASH¹, TADEUSZ NAMIOTKO¹



- ¹ Laboratory of Biosystematics and Ecology of Aquatic Invertebrates, Department of Evolutionary Genetics and Biosystematics, University of Gdansk, Wita Stwosza 59, 80-308 Gdansk, Poland email: agata.szwarc@ug.edu.pl
- ² Royal Belgian Institute of Natural Sciences (RBINS), Natural Environments, Freshwater Biology Vautierstraat 29, B-1000 Brussels, Belgium
 - ³ Ghent University, Department of Biology, K.L. Ledeganckstraat 35, B-9000 Ghent, Belgium



Diagnosis of Pseudocypris sp. nov.

Carapace (Cp) in lateral view with dorsal margin slightly arched with greatest height in front of mid-length and sloping towards the posterior edge. Lateral ala c. 1/3 of the width of one valve, not equally wide along the circumference of the Cp. External surface delicately reticulate with large spines, especially in postero-dorsal areas. Anterior margin of RV serrated. LV slightly overlapping RV posteriorly. A2 with long swimming setae. Md-palp with two claws and four setae. Terminal segment of Mx1-palp elongate with five setae. T1 with six hirsute rays. Prehensile palps 2-segmented, left palp with terminal segment hook-like, long and narrow, right one with terminal segment wider and shorter than left one. Penultimate segments of T2 and T3 undivided. CR stout, well developed. Hp with pointed medial shield (ms), dorsal lateral shield (dls) small subrectangular, ventral lateral shield (vls) subtriangular, wide and large, dorsal margin sunken, proximally arched and beak-like apically.

Type locality: South Africa, North-West Province, small temporary grass pan near the Barberspan lake (**SA-16**); 26°33'19"S, 25°36'32"E

Additional material: South Africa, North-West Province

SA-3: temporary grass pan near the Witpan; 26°24'26"S, 25°36'10"E

Intraspecific variability

Specimens from sites SA-3, SA-7, SA-8, SA-10 differed from the holotype (SA-16) primarily in the lack of spines on valves. Their carapaces are slightly larger and have a narrower ala. LV of the holotype is more elongated. Ostracod without spines have a more rounded ms and almost straight dorsal part of the vls. Specimens from site SA-3 have nodules on the carapace in places where ostracods from SA-16 have spines. This morphological variation in ornamentation may be attributable to the site-specific environmental conditions or differential predation pressures combined with a genetic component. Notably, the spined carapace appears to develop only during the last juvenile stage, as younger stages from all studied sites exhibit smooth carapaces.

 \Im (SA-16): LV: L = 2202, H = 1218; RV: L = 2101, H = 1211 µm

(SA-3): LV: L = 2335, H = 1515; RV: L = 2358, H = 1458; Cp: L = 2347, W = 2225 μm (SA-16): LV: L = 2205, H = 1313; RV: L = 2218, H = 1348; Cp: L = 2291, W = 2197 µm

(SA-3): LV: L = 2395, H = 1548; RV: L = 2418, H = 1533; Cp: L = 2373, W = 2065 µm



Caudal ramus (CR)