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## THE IDENTITY OF XAIVA PULCHELLA MACLEAY, 1838 (DECAPODA, PORTUNIDAE)

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The genus *Xaiva* MacLeav, 1838 so far was considered to have two species: X. biguttata (Risso, 1816) and X. macleayi Barnard, 1947. The genus is restricted to the Mediterranean, the eastern Atlantic Ocean and the coast of southern Africa, Morphologically, the closest relative is the genus *Portumnus* Leach, 1814 but the two genera can easily be distinguished by the shape of the front of the carapace. Xaiva species have the frontal region of the carapace produced well in advance of the first pair of anterolateral teeth, whereas in *Portumnus* it is only slightly produced. The genus *Xaiva* was established by MacLeay in 1838, using as type-species a new species (X. pulchella) caught in the intertidal zone of the South African coast.

Barnard (1947, 1950) synonymized X. pulchella with Xaiva biguttata (Risso, 1816), a common species from the coast of the Mediterranean Sea and the eastern Atlantic Ocean from England to the Cape Verde Islands.

Initially, the species were considered to be distinct by several authors (A. Milne Edwards, 1862; Ortmann, 1894; Stebbing, 1910; Balss, 1921), but the synonymy established by Barnard (1947, 1950) was subsequently accepted throughout (Kensley, 1970; Penrith & Kensley, 1970; Kensley & Penrith, 1980; Kensley, 1981; Manning & Holthuis, 1981). However, Manning & Holthuis (1981) called the attention to the necessity of a comparative study using material from both localities (southern Africa and Mediterranean-Northeast Atlantic) in order to clarify this problem.

The analysis of the specimens from both areas showed these to be distinct, several important and constant differences having been found. Therefore, they

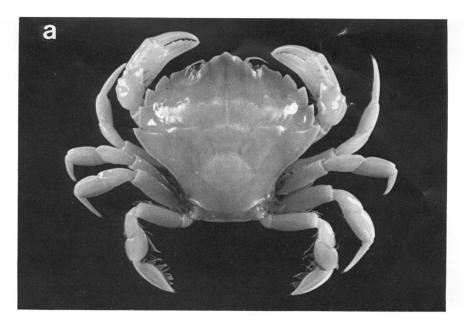




Fig. 1. a, *Xaiva biguttata* (Risso, 1816), male  $(19 \times 21 \text{ mm})$  from Cadaqués, Mediterranean coast of N.E. Spain. b, *Xaiva pulchella* MacLeay, 1838, male  $(24 \times 26 \text{ mm})$  from Cape Town area, S. Africa.

should be regarded as belonging to two different species and the name X. pulchella MacLeay, 1838 should be revalidated.

Measurements given refer to the length of carapace × maximum width of carapace. Abbreviations used are: RMNH, Rijksmuseum van Natuurlijke Historie, Leiden; MNHN, Muséum national d'Histoire Naturelle. Paris; SAM, South African Museum, Cape Town; ICM, Instituto de Ciencias del Mar, Barcelona.

The specimens examined are the following:

Mediterranean and North East Atlantic:  $1 \ Q$ ,  $16 \times 18 \ mm$ , Cadaqués, N.E. Spain (RMNH);  $3 \ O$ ,  $13 \times 14 - 20 \times 23 \ mm$ ,  $2 \ Q$ ,  $13 \times 13 - 19 \times 18 \ mm$ , Cadaqués (ICM);  $1 \ O$ ,  $17 \times 19 \ mm$ , Arenys de Mar, N.E. Spain (ICM);  $1 \ Q$  ov.,  $21 \times 23 \ mm$ , Naples, Italy (RMNH);  $1 \ O$  9 × 10 mm, Tunis (MNHN);  $1 \ O$ ,  $16 \times 18 \ mm$ ,  $1 \ Q$ ,  $11 \times 12 \ mm$ , Le Croisic, westcoast of France (MNHN).

Southern Africa: 7  $\circlearrowleft$ ,  $13 \times 14 - 25 \times 29$  mm,  $2 \circlearrowleft$ ,  $15 \times 16 - 23 \times 26$  mm, Cape of Good Hope area (SAM);  $1 \circlearrowleft$ ,  $14 \times 16$  mm, northern coast of Namibia (ICM);  $1 \circlearrowleft$ ,  $18 \times 20$  mm, Walvis Bay, Namibia (RMNH).

The main differences between the two species are the following:

- 1. The carapace contour is clearly different. In *X. pulchella* the posterolateral borders are quite straight (fig. 1b), whereas in *X. higuttata* they are concave (fig. 1a).
- 2. The carapace surface is rougher in *X. pulchella*, and the crests are produced. In *X. biguttata* the carapace is smooth and the crests are not produced.
  - 3. The cardiac region is more convex in X. pulchella than in X. biguttata.
- 4. The crest on the dorsal surface of the carpus of the walking legs is better developed in X, pulchella than in the northern species.

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## INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

The following applications dealing with Grustacea were published in recent issues of the Bulletin of Zoological Nomenclature: Case 2622 in vol. 45 part 3, pp. 188-190 on 23 September 1988; Case 2636 in vol. 45 part 4, pp. 262-263, on 16 December 1988; Case 2645 in vol. 45 part 4, pp. 264-266; Case 2643 in vol. 45 part 4, pp. 267-269; and Case 2644 in vol. 45 part 4, pp. 270-271. Comment or advice on these applications is invited, and should be sent to the Executive Secretary, International Commission on Zoological Nomenclature, British Museum (Natural History), Gromwell Road, London SW7 5 BD, U.K.

Case 2622. Pleuromma princeps Scott, 1894 (currently Gaussia princeps; Grustacea, Copepoda): proposed conservations of the specific name. Submitted by Kuni Hulsemann, Biologische Anstalt Helgoland, Notkestrasse 31, D-2000 Hamburg 52, Federal Republic of Germany.

Abstract. The purpose of this application is the conservation of the widely used copepod specific name *princeps* Scott, 1894, by ruling that it is not invalid, despite having been rejected before 1961 as a former junior secondary homonym of *Metridia princeps* Giesbrecht, 1889.

Case 2636. Fizesereneia Takeda & Tamura, 1980 (Crustacea, Decapoda): proposed confirmation of Troglocarcinus heimi Fize & Serène, 1956, as the type species. By Roy K. Kropp, Battelle Ocean Sciences-Ventura Operations. 1431 Spinnaker Drive, Ventura, California 93001, U.S.A.

Abstract. The purpose of the application is to confirm the designation of *Troglocarcinus heimi* Fize & Scrène, 1956, as the type species of the coral gall crab genus *Fizescreneia* Takeda & Tamura, 1980, despite a misidentification by Takeda & Tamura.

Case 2643. *Iphinoe* Bate, 1856 (Crustacea, Cumacea): proposed conservation. By M. Bacescu, Museul National de Istorie Naturala "Grigore Antipa", Sos. Kisselef 1, Bucuresti 79744, Romania; and L. B. Holthuis, Rijksmuseum van Natuurlijke Historie, P.O. Box 9517, 2300 RA Leiden, The Netherlands.

Abstract. The purpose of the application is the conservation of the generic name *Iphinoe* Bate, 1856 (Cumacea) by the suppression of the unused senior homonym *Iphinoe* Rafinesque, 1815 (Arachnoidea) and also of the senior homonym *Iphinoe* H. & A. Adams, 1854, which is in occasional use for a restricted genus of gastropods.

Case 2644. Leucon Krøyer, 1846 (Crustacea, Cumacea): proposed conservation. By the same authors as Case 2643.

Abstract. The purpose of the application is the conservation of the generic name *Leucon* Krøyer, 1846 (Cumacca) by the suppression of the virtually unused senior synonym *Leucon* Schoenherr, 1834 (Insecta Coleoptera).