A CHECK LIST OF MARINE AMPHIPODS OF PAKISTAN

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Abstract

Seventy species of amphipods belonging to twenty nine families have been recorded from the Pakistan coast as indicated by literature survey and new collections. Among the new collections, 4 species are indetermined and fourteen species are reported from Pakistan for the first time. In the present paper an annotated checklist is given, indicating the original source of the record and any new records for the area..

Introduction

The Amphipoda is an order that includes over 7,000 described species of small shrimp-like crustaceans. The amphipods are ecologically important, and as a component of benthic infaunal communities are a primary food resource for marine invertebrates, fish and bird species of the world.

Few reports on the taxonomy of the amphipods are available from Pakistan. However, there are some studies based on material from Pakistani waters which are included in the present list. Barnard (1937) reports 28 species; Nair (1977& 1992) reported 1 and 2 species respectively; Ahmed (1976) reported 12 species from Karachi coast; Javed (1983; 1987) recorded two species from the northern Arabian sea; Nair and Jayalakshmy (1992) reported 3 species; Nayeem *et al.* (1993) reported 5 species from Pakistani waters. Kazmi (1994; 1995) reported two species. Kazmi and Bano (2003) reported one species. Bano and Kazmi (2004; 2005, 2008a, 2008b, 2010) described a new species and added two species..

The present report adds 18 species to the Pakistan faunal list. 14 are new records, and 4 indetermined species, given here as "sp.". These may turn out to be new to science and as such will be dealt in separate papers. New records are marked with an asterisk,

The new amphipod collections were obtained both from Sindh and Makran regions of the Pakistan coast from intertidal to subtidal zones. For classification Martin and Davis (2001) is followed, and the list is arranged in alphabetical order by family. The authorities of the taxa are not explained in the references given at the end.

Check List of Order Amphipoda Latreille, 1816

Name of species

Suborder Gammaridea Latreille, 1802 1. Family Ampeliscidae, Costa, 1857 Genus Ampelisca Krøyer, 1842 A. brevicornis* (Costa, 1853) Genus Byblis Boeck, 1871 Byblis sp. B. lepta (Giles, 1888) Source: Ahmed, 1976 2. Family Ampithoidae Stebbing, 1899 Genus Ampithoe Leach, 1814 Ampithoe sp A. hirsute* Ledoyer, 1978 A. ramondi Audouin, 1828 Source: Kazmi & Bano, 2003

A. spuria* Krapp-Schickel 1978 Genus Cymadusa Savigny, 1816 Cymadusa sp. C. filosa Savigny, 1816 Source: Ahmed, 1976 (as Grubia filosa); Javed, 1983

- Family Aoridae Walker, 1904 Genus Grandidierella Coutiere, 1904 G. trispinosa Bano & Kazmi, 2010 Source: Bano & Kazmi, 2010
- 4. Family Corophidae Leach, 1814 Genus Apocorophium Bousfield & Hoover, 1997 A. acutum* (Chevreux, 1908) Genus Cerapus, Say, 1817 C. tubularis* Say, 1817 Genus Hirayamia Bluefield & Hoover, 1997 H. tirmiziae Bano & Kazmi, 2008 Source: Bano & Kazmi, 2008 Genus Monocorophium Bousfield & Hoover, 1997 M. insidiosum* (Crawford, 1937) M. acherusicum (Costa, 1851) Source: Ahmed, 1976 (as Corophium acherusicum)

- Family Cyphocarididae Lowry & Stoddart, 1997 Genus Cyphocaris Boeck, 1871 C. faurei Barnard, 1916 Source: Barnard, 1937
- 6. Family Hyalidae Bulycheva, 1957
 Genus Parhyale Stebbing, 1897 *P. hawaiensis* (Dana, 1853)
 Source: Ahmed, 1976 as (Hyale hawaiensis)
- 7. Family Isaeidae Dana, 1853 Genus Cheiriphotis Walker, 1904 C. megacheles* (Giles, 1885) Genus Photis Krøyer, 1842 P. longicaudata (Bate & Westwood, 1862) Source: Ahmed, 1976
- 8. Family Ischyroceridae Stebbing, 1899 Genus Ericthonius Milne-Edwards, 1830 E. brasiliensis (Dana, 1853) Source: Ahmed, 1976 (as Podoceros brasiliensis); Kazmi, 1995 Genus Jassa Leach, 1814 J. falcata* (Montagu, 1808)
- 9. Family Leucothoidae Dana, 1852 Genus Leucothoe Leach, 1814 L. furina (Savigny, 1817) Source: Kazmi, 1994 L. spinicarpa (Abildgaard, 1789) Source: Ahmed, 1976
- Family Lysianassidae Dana, 1849 Genus Shoemakerella Pirlot, 1936 S. nasuta Dana, 1853 Source: Ahmed, 1976
- 11. Family Melitidae Bousfield, 1977 Genus *Elasmopus* Costa, 1853 *E. pectinicrus* (Bate, 1862) Source: Ahmed, 1976 *E. japonicus* Stephenson, 1937 Source: Javed, 1987 Genus *Melita* Leach, 1814 *Melita sp.*Genus *Quadrivisio* Stebbing, 1907 *Q. bengalensis* Stebbing, 1907 Source: Ahmed, 1976
- 12. Family Podoceridae Leach, 1814
 Genus Laetmatophilus Brazelius, 1859
 L. paradurbanensis Bano & Kazmi, 2004
 Source: Bano & Kazmi, 2004
- 13. Family Stenothoidae Boeck, 1871 Genus Stenothoe Dana, 1852 S. gallensis* Source: Walker, 1904

- 14. Family Synopiidae Dana, 1853 Genus *Ileraustroe* Barnard, 1972 *I. ilergetes** (Barnard, 1964) Genus *Synopia* Dana, 1852 *S. ultramarina* Dana, 1852 Source: Barnard, 1937
- 15. Family Talitridae Rafinesque, 1815 Genus *Talorchestia* Dana, 1853 *T. deshayesi** (Audouin, 1826) *T. martensi* (Weber, 1795) Source: Ahmed, 1976
- 16. Family Urothoidae Bousfield, 1978 Genus Urothoe Dana, 1852 U. grimaldi* Chevreux, 1895 U. spinidigitus Walker, 1904 Source: Ahmed, 1976

Suborder Caprellidea Leach, 1814

1. Family Pariambidae Laubitz, 1993 Genus *Hemiaegina* Mayer,1890 *H. minuta** Mayer, 1890

Suborder Hyperiidea Milne-edwards, 1830

- Family Hyperiidae Dana, 1853 Genus Hyperia Latreille, 1823 H. promontorii Stebbing, 1888 Source: Barnard, 1937 Genus Phronimopsis Clause, 1879 P. spinifera* Clause, 1879 Genus Themistella Bovallius, 1887 T. fusca* (Dana, 1853)
- 2. Family Lanceolidae Bovallius, 1887 Genus *Lanceola* Say, 1818 *L. sayana* Bovallius, 1885 Source: Barnard, 1937
- 3. Family Lycaeidae Claus, 1879 Genus Brachyscelus Bate, 1861 B. globiceps (Claus, 1879) Source: Barnard, 1937 Genus Euthamneus Bovallius, 1890 E. platyrhnchus (Stebbing, 1888)

Source: Barnard, 1937(as*Thamneus platyrhynchus*) Genus *Lycaea* Dana, 1852 *L. pulex* Marion, 1874 Source: Barnard, 1937

4. Family Oxycephalidae Dana, 1853 Genus Leptocotis Streets, 1878 L. tenuirostris (Claus, 1887) Source: Barnard, 1937 Genus Oxycephalus Milne-Edwards, 1840 O. clause Bovallius, 1890 Source: Nair, 1992; Nayeem et al, 1993 O. piscator Milne-Edwards, 1840 Source: Naveem et al, 1993 Genus Rhabdosoma White, 1847 R. armatum (H. Milne Edwards, 1840) Source: Nair & Jayalakshmy, 1992 R. brevicaudatum Stebbing, 1888 Source: Nair & Jayalakshmy, 1992 R. whitei Bate, 1862 Source: Barnard, 1937 Genus Simorhynchotus Stebbing, 1888 S. antennarius (Claus, 1871) Source: Barnard, 1937; Nair & Jayalakshamy, 1992 Genus Streetsia Stebbing, 1888 S. challengeri stebbing, 1888 Source: Barnard, 1937; Nayeem et al, 1993 S. mindanaonis (Stebbing, 1888) Source:Nayeem et al, 1993 S. porcellus (Claus, 1879) Source:Barnard, 1937 Genus Tulbergella Bovallius, 1887 T. cuspidate Bovallius, 1887 Source: Nayeem et al, 1993

5. Family Paraphronimidae Bovallius, 1887 Genus Paraphronima Claus, 1879 *P. crassipes* Claus, 1879 Source: Nair, 1977 *P. gracilis* Claus, 1879 Source: Barnard, 1937; Nair, 1977

- 6. Family Parascelidae Bate, 1862 Genus *Thyropus* Dana, 1852 *T. sphaeroma* Claus, 1879 Source: Barnard, 1937
- 7. Family Phronimidae Rafinesque, 1815 Genus *Phronima* Latreille, 1802 *P. atlantica* Guérin, 1836 Source: Barnard, 1937 *P. colletti* Bovallius, 1887 Source: Barnard, 1937; Bano & Kazmi, 2005 *P. sedentaria* Barnard, 1937

Acknowledgements

Genus Phronimella Claus, 1872 P. elongata (Claus, 1862) Source: Barnard, 1937
8. Family Phrosinidae Dana, 1853 Genus Anchylomera Milne-Edwards, 1830 A. blossevilli Milne-Edwards, 1830 Source: Barnard, 1937 Genus Phrosina Risso, 1822 P. semilunata Risso, 1822 Source: Barnard, 1937; Bano & Kazmi, 2008
9. Family Platyscelidae Bate, 1862 Genus Amphithyrus Claus, 1879 A. bispinosus Claus, 1879 Source: Barnard, 1937 Genus Hemityphis Claus, 1879

H. crustulum Claus, 1879 Source: Barnard, 1937 Genus Tetrathyrus Claus, 1879 T. forcipatus Claus, 1879 Source: Barnard, 1937

Source: Barnard, 1937

- 10. Family Pronoidae Dana, 1853 Genus Eupronoë Claus, 1879 E. maculata Claus, 1879 Source: Barnard, 1937 Genus Parapronoe Claus, 1879 P. parva Claus, 1879 Source: Barnard, 1937 (as Sympronoe parva)
- Family Scinidae Stebbing, 1888
 Genus Scina Prestandrea, 1833
 S. marginata (Bovallius, 1885)
 Source: Barnard, 1937
- 12. Family Vibiliidae Dana, 1853 Genus Vibilia M. Edwards, 1830 V. armata Bovallius, 1887 Source: Barnard, 1937 V. pyripes Bovallius, 1887 Source: Barnard, 1937

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