

New records of marine fish species from São Tomé Island (Eastern Atlantic)

Neue Nachweise von Meeresfischen von der Insel São Tomé (östlicher Atlantik)

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Zusammenfassung: Von der Insel São Tomé (Golf von Guinea) werden eine bisher unbeschriebene Art der Gattung *Lecanogaster* (Gobiesocidae) sowie die Arten *Enneacampus kaupi* (Syngnathidae) und *Monochirus atlanticus* (Soleidae) gemeldet. Zudem wird das Vorkommen von *Alphestes afer* (Serranidae) bestätigt.

WIRTZ et al. (2007) summarized the state of knowledge about the coastal fish species of São Tomé and Príncipe. Since then, several new species have been described from there (KOVAČIĆ & SCHLIEWEN 2008; SCHLIEWEN & KOVAČIĆ 2008; ROCHA et al. 2012; WIRTZ & IWAMOTO 2015) and additional records have been published (FELIX et al. 2016; VASCO-RODRIGUES et al. 2016; REINER & WIRTZ 2016). I here report on three more new records of coastal fishes from São Tomé Island and the first record of a living *Alphestes afer* in the eastern Atlantic.

The species reported here were photographed under water and – where possible – caught with a hand-held aquarium net, while snorkeling or SCUBA diving in a depth range of 0-35 m. All observations were made during a field trip to São Tomé Island from 28 January to 11 February 2017.

1) *Lecanogaster* n. sp. (Gobiesocidae)
This small clingfish (fig. 1 A) was encountered on large gorgonians (*Leptogorgia* and *Muriceopsis* spp.), in a depth range of 17 to 34 m, near Santana (0°14'45"N 6°44'50"E). One specimen was obtained from a sea-whip *Stichopathes occidentalis* Brook, 1889 in 30 m depth. The species will be described in a separate publication.

2) *Enneacampus kaupi* (Bleeker, 1863) (Syngnathidae)
Only one pipefish species has previously been recorded from São Tomé Island, namely *Micropphis brachyurus aculeatus* (Kaup, 1856). Both,

this species plus a small specimen of *Enneacampus kaupi* (Bleeker, 1863) were caught with a seine net at the mouth of the river Malanza at Praia Micondo, near Porto Alegre (0°02'40"N 6°32'02"E) (fig. 1 B). The specimen has been deposited in the Zoologische Staatssammlung, Munich, Germany (ZSM, currently uncatalogued). *E. kaupi* has been recorded from rivers and estuaries from Guinea to Congo (FRITZSCHE 2016) but not yet from São Tomé and Príncipe Islands.

3) *Monochirus atlanticus* Chabanaud, 1940 (Soleidae)

A specimen apparently belonging to this species was photographed, at night (fig. 1 C), on sandy-muddy bottom in about 10 m depth in Santana bay (0°14'45"N 6°44'47"E). It escaped capture. *M. atlanticus* has been recorded from the northern coast of Spain and Portugal to Gabon, including the Cape Verde Islands (MUNROE et al. 2015), but not yet from São Tomé and Príncipe Islands.

4) *Alphestes afer* (Bloch, 1793) (Serranidae)
Originally described from the coast of Guinea, this species had frequently been reported from the western Atlantic but never again from the eastern Atlantic since its original description, and the type locality had been regarded as erroneous, until a single specimen was encountered in São Tomé fish market in 2004 (CRAIG et al. 2006). An underwater photo (fig. 4 D) taken by

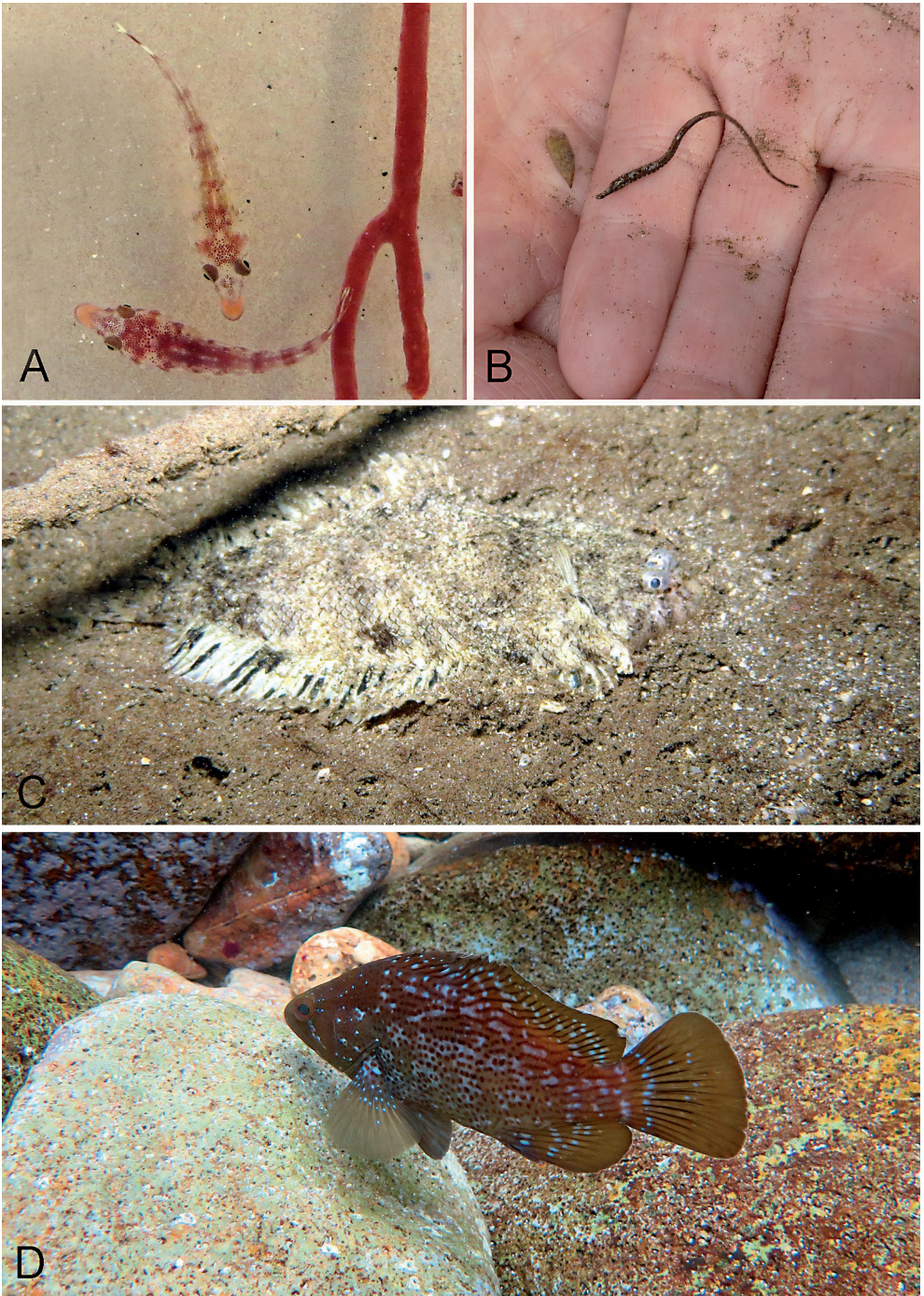


Fig. 1: **A** *Lecanogaster* n. sp. (Photo: P. WIRTZ). **B** *Enneacampus kaupi* (Photo: E. SERRÃO). **C** *Monochirus atlanticus* (Photo: P. WIRTZ). **D** *Alphestes afer* (Photo: D. PAULO).

Abb. 1: **A** *Lecanogaster* n. sp. (Foto: P. WIRTZ). **B** *Enneacampus kaupi* (Foto: E. SERRÃO). **C** *Monochirus atlanticus* (Foto: P. WIRTZ). **D** *Alphestes afer* (Foto: D. PAULO).

DIOGO PAULO in shallow water at Ilheus Cabras (0°24'32"N 6°42'52"E) on 30 January 2017 now provides the first record of a living *Alphestes afer* from the eastern Atlantic. Nuno Vasco Rorigues (pers. comm.) has also seen the species when diving at the wreck "Mar Vassa" (0°25.099'N, 6°41.718'E) and in São Tomé fish market.

234 coastal fish species were recorded from São Tomé and Príncipe by WIRTZ et al. (2007). Since then 19 additional coastal species have been reported from there (this note and references in the introduction). The comparatively low number of species recorded (compare WIRTZ et al. 2013) and the additional species encountered show that the coastal marine fish fauna of São Tomé and Príncipe is still insufficiently explored.

Acknowledgements

Many thanks to ALBERTO MIRANDA of Atlantic Diving Center for his friendly support of my diving activities. Uli SCHLIEWEN identified the pipefish and Ronald FRICKE confirmed my identification of *Monochirus*. Ester SERRÃO and the Centro de Ciências do Mar (CCMAR) of the University of the Algarve invited me on this field trip to São Tomé Island. Karim ERZINI captured the pipefish. Diogo PAULO and Ester SERRÃO kindly contributed photographs. This study received Portuguese national funds through FCT – Foundation for Science and Technology – through project UID/Multi/04326/2013.

Literature

CRAIG, M.T., P. BARTSCH, P. WIRTZ, & P.C. HEEMSTRA. 2006. Redescription and validation of *Alphestes afer* (Bloch 1793) as an ampho-Atlantic grouper species (Perciformes: Serranidae). *Cybiurn* 30, 327-331.

FÉLIX, P.M., P. CHAINHO, R.F. DE LIMA., J.L. COSTA, A.J. ALMEIDA., I. DOMINGOS, & A.C. BRITO. 2016. Mangrove fishes of São Tomé Island (Gulf of Guinea): new occurrences and habitat usage. *Marine and Freshwater Research* 68, 123-130. DOI:10.1071/MF15392 (IF2015 1,583; Q2 Fisheries).

FRITZSCHE, R.A. 2016. Syngnathidae, pp. 2231-2239. In: *The living marine resources of the Eastern Central Atlantic*. Volume 3: Bony fishes, part 1 (Elopiformes to Scorpaeniformes) (CARPENTER, K.E., & N. DE ANGELIS, eds). FAO Species Identification Guide for Fishery Purposes, Rome, FAO.

KOVAČIĆ, M., & U.K. SCHLIEWEN. 2008. A new species of *Gorgogobius* (Perciformes: Gobiidae) from São Tomé Island. *Zootaxa* 1686, 29-36.

MUNROE, T., D. GOLANI, O. KADA, A. NOUAR, J.P. QUIGNARD, & A. CUTTELOD. 2015. *Monochirus atlanticus*. The IUCN Red List of Threatened Species 2015: e.T50078139A70838837. <http://dx.doi.org/10.2305/IUCN.UK.2015-4.RLTS.T50078139A70838837.en>

REINER, F., & P. WIRTZ. 2016. Five new records of coastal fishes from São Tomé Island. *Revista de la Academia Canaria de Ciencias* 28, 127-131.

ROCHA, L.A., A. BRITO, & D.R. ROBERTSON. 2012. *Sparisoma choati*, a new species of parrotfish (Labridae: Scarinae) from the tropical eastern Atlantic. *Zootaxa* 3152, 61-67.

SCHLIEWEN, U.K., & M. KOVAČIĆ. 2008. *Didogobius amicuscaridis* spec. nov. and *D. wirtzi* spec. nov., two new species of symbiotic gobiid fish from São Tomé and Cape Verde Islands. *Spixiana* 31, 247-261.

VASCO-RODRIGUES, N., J. FONTES, & A. ANDRADEBERTONCINI. 2016. Ten new records of marine fishes for São Tomé, West Africa. *Acta Ichthyologica et Piscatoria* 46, 123-129.

WIRTZ, P., C.E.L. FERREIRA, S.R. FLOETER, R. FRICKE, J.L. GASPARINI, T. IWAMOTO, L. ROCHA, C.L.S. SAMPAIO, & U.K. SCHLIEWEN. 2007. Coastal fishes of São Tomé and Príncipe islands, Gulf of Guinea (Eastern Atlantic Ocean) – an update. *Zootaxa* 1523, 1-48.

WIRTZ, P., & T. IWAMOTO. 2016. A new species of *Serranus* from São Tomé and Príncipe, eastern Atlantic (Pisces Teleostei, Serranidae). *Proceedings of the California Academy of Sciences Series* 4, 63, 191-200.

WIRTZ, P., A. BRITO, J.M. FALCÓN, R. FREITAS, R. FRICKE, V. MONTEIRO, F. REINER, & O. TARICHE. 2013. The coastal fishes of the Cape Verde Islands – new records and an annotated check-list. *Spixiana* 36, 113-142.

Received: 24.05.2017

Accepted: 25.06.2017