



Acta Scientiarum. Biological Sciences

ISSN: 1679-9283

eduem@uem.br

Universidade Estadual de Maringá

Brasil

Rotundo, Matheus Marcos; Vaske Júnior, Teodoro

First record of the choicy ruff, *Seriola lalandi* Guichenot, 1848 (Perciformes: Centrolophidae) in
Brazilian waters

Acta Scientiarum. Biological Sciences, vol. 34, núm. 1, enero-marzo, 2012, pp. 1-3

Universidade Estadual de Maringá

.png, Brasil

Available in: <http://www.redalyc.org/articulo.oa?id=187123657001>

- How to cite
- Complete issue
- More information about this article
- Journal's homepage in redalyc.org

redalyc.org

Scientific Information System

Network of Scientific Journals from Latin America, the Caribbean, Spain and Portugal

Non-profit academic project, developed under the open access initiative



First record of the choicy ruff, *Seriolella porosa* Guichenot, 1848 (Perciformes: Centrolophidae) in Brazilian waters

Matheus Marcos Rotundo* and Teodoro Vaske Júnior

Universidade Santa Cecília, R. Oswaldo Cruz, 266, 11045-907, Santos, São Paulo, Brazil. *Author for correspondence. E-mail: mmrotundo@unisanta.br

ABSTRACT. A female specimen of choicy ruff, *Seriolella porosa*, is reported for the first time in Brazilian waters, 384 mm total length captured by the bottom trawl commercial fishery on August 12th, 2007, at 36 meters local depth off the São Paulo coast, southeastern Brazil (23°49'56"S; 45°53'24"W). The occurrence may be uncommon, probably associated with a branch of cold water of the Malvinas current.

Keywords: Centrolophidae, *Seriolella porosa*

Primeiro registro do savorin, *Seriolella porosa* Guichenot, 1848 (Perciformes: Centrolophidae) em águas brasileiras

RESUMO. É reportada pela primeira vez em águas brasileiras a ocorrência de um exemplar de fêmea de savorin, *Seriolella porosa*, de 384 cm CT capturado por arrasto comercial de parelha no sudeste do Brasil em 12 de agosto de 2007, a 36 metros de profundidade local (23°49'56"S; 45°53'24"W). A ocorrência deve ser incomum, provavelmente associada com um braço da corrente das Malvinas.

Palavras-chave: Centrolophidae, *Seriolella porosa*

Introduction

The family Centrolophidae is composed by seven genera with about 27 species, although *Schedophilus* and *Seriolella* were regarded as sister taxa by Doiuchi et al. (2003), being epi-, meso- and benthopelagic fishes of tropical and temperate seas. They are found in the continental shelf and near oceanic islands (HAEDRICH, 1967; HAEDRICH 2002; HAEDRICH; HORN 1972; NELSON, 2006). In the southwest Atlantic, the occurrence of the genus *Seriolella* is restricted to Uruguayan and Argentinean continental shelf waters (35 - 50°S), where two species, *Seriolella porosa* and *S. caerulea* were validated by Cousseau et al. (1993). Some authors (; LEWIS 2005; MENNI; LOPEZ 1984) have cited the South American choicy ruff as *S. punctata*, although *S. porosa* might be considered the valid species (COUSSEAU et al., 1993). *Seriolella porosa* was formerly captured as bycatch, but became an important fishery resource in recent years in Argentina (GARCIARENA; PERROTA, 2002).

Former reports of Centrolophidae in Brazilian waters only indicate the presence of *Centrolophus niger* (CARVALHO-FILHO, 1999; BERNARDES et al., 2005; MENEZES et al., 2003) and *Hyperoglyphe bythites* (CARVALHO-FILHO, 1999), and/or actually *H. macrophthalmus* (MENEZES et al., 2003).

Material and methods

In the present report, one female specimen, 384 mm total length (Figure 1) was captured by a bottom trawl commercial fishery on August 12th, 2007.



Figure 1. The choicy ruff, *Seriolella porosa*, captured in southeastern Brazil (AZUSC 2636, 384 mm total length).

Local depth was 36 meters near Montão de Trigo Island off the São Paulo coast, southeastern Brazil (23°49'56"S; 45°53'24"W) (Figure 2).

Results and discussion

According Garciarena and Perrota (2002), *S. porosa* attains a maximum size of 491 mm. Characteristics that confirm the specimen as *S. porosa* are the seven (7) spines in the first dorsal fin and thirty-five (35) rays in the second dorsal fin, the three (3) spines and twenty-two (22) rays in the anal fin, the twenty-one (21) rays in the pectoral fin, twenty-one (21) gill rakers, no caudal keels, lateral line with ninety-six (96) scales, eye diameter (34.5 mm)

and body depth (90 mm). In the southwest Atlantic the only similar species is *Seriolella caerulea*, which is a coastal species and southernmost distributed in latitudes higher than 46°S. *Seriolella porosa* is more abundant in lower latitudes (northward 46°S) and deep waters of the continental shelf (COUSSEAU et al., 1993).

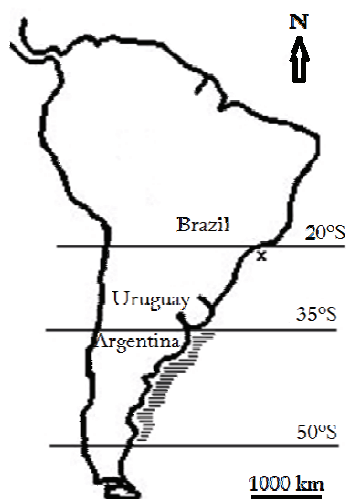


Figure 2. Distribution of *Seriolella porosa* in the Atlantic coast (dashed area). The X shows the record in the present study.

Another diagnostic feature that distinguishes both species is the body proportion, being the body width of *S. porosa* more than three times the body length as proposed by Cousseau et al. (1993). This record extends the limit of the species distribution to southeastern Brazil (23°S), although the occurrence may be uncommon, as there is a considerable fishing activity along the continental shelf of southern and southeastern Brazil, including bottom trawling, gillnet, purse seine, among other fishing gears, and *S. porosa* was never recorded before in Brazilian waters. During the winter, cold water of the Malvinas current, a branch of Subantarctic water, can reach 30°S in southern Brazil (CASTELLO; MÖLLER JR., 1977; SEELIGER et al., 1997), and some isolated individuals of *S. porosa* may come to the southern and even southeastern region of Brazil along with the boundaries of the Malvinas current, more specifically with the cold water of the continental shelf, a coastal branch of the Malvinas current, which can explain the presence of the species in the present report, given that the capture occurred during winter. The specimen is stored in the Zoological collection of Santa Cecília University (Unisantia) - AZUSC 2636.

Conclusion

The distribution of the choicy ruff, *Seriolella porosa* was extended from the anterior report of 35°S to 20°S in the Southeastern Brazil.

Acknowledgements

The authors are grateful to Thiago de Castro and the fishermen of the Fishery Industry Aliança Pesca, who kindly allowed the sampling by the Pro-Pesca Project.

References

- BERNARDES, R. A.; FIGUEIREDO, J. L.; RODRIGUES, A. R.; FISCHER, L. G.; VOOREN, C. M.; HAIMOVICI, M.; ROSSI-WONGTSCHOWSKI, C. L. D. B. **Peixes da Zona Econômica Exclusiva da região sudeste-sul do Brasil: levantamento com armadilhas, pargueiras e rede de arrasto de fundo**. São Paulo: Edusp, 2005.
- CARVALHO-FILHO, A. **Peixes: costa brasileira**. 3. ed. São Paulo: Melro, 1999.
- CASTELLO, J. P.; MÖLLER JR., O. O. On the oceanographic conditions in the Rio Grande do Sul State. **Atlântica**, v. 2, n. 2, p. 25-110, 1977.
- COUSSEAU, M. B.; FORCINITI, L.; UBALDI, G. Species of the Genus *Seriolella* (Centrolophidae) in Southwest Atlantic waters. **Japan Journal of Ichthyology**, v. 40, n. 2, p. 183-187, 1993.
- DOIUCHI, R.; SATO, T.; NAKABO, T. Phylogenetic relationships of the stromateoid fishes (Perciformes). **Ichthyological Research**, v. 51, n. 3, p. 202-212, 2003.
- EDER, E. B.; LEWIS, M. N. Proximate composition and energetic value of demersal and pelagic prey species from the SW Atlantic Ocean. **Marine Ecology Progress Series**, v. 291, n. 1, p. 43-52, 2005.
- GARCIARENA, A. D.; PERROTTA, R. G. Características biológicas y de la pesca del savorín *Seriolella porosa* (Pisces: Centrolophidae) del mar argentino. **INIDEP Informe Técnico**, v. 49, n. 1, p. 1-19, 2002.
- HAEDRICH, R. L. The stromateoid fishes; systematics and a classification. **Bulletin of the Museum Comparative Zoology**, v. 135, n. 2, p. 31-139, 1967.
- HAEDRICH, R. L. Centrolophidae In: CARPENTER, K. E. (Ed.). **The living marine resources of the western central Atlantic**. Roma: FAO, 2002. p. 1867-1868. (FAO species identification guide for fishery purposes, v. 3, n. 2).
- HAEDRICH, R. L.; HORN, M. H. A key to the stromateoid fishes. **Woods Hole Oceanographic Institution Technical Report**, v. 72, n. 15, p. 1-46, 1972.
- MENEZES, N. A.; BUCKUP, P. A.; FIGUEIREDO, J. L.; MOURA, R. L. **Catálogo das espécies de peixes marinhos do Brasil**. São Paulo: Museu de Zoologia, 2003. p. 160.
- MENNI, R.; LOPEZ, H. C. Distributional patterns of argentine marine fishes. **Physis**, v. 42, n. 103, p. 71-85, 1984.

NELSON, J. P. **Fishes of the world**. 4th ed. New Jersey: John Wiley and Sons, 2006.

SEELIGER, U.; ODEBRECHT, C.; CASTELLO, J. P. **Subtropical convergence environments**: the coast and sea in the southwestern Atlantic. 1st ed. Berlin: Springer-Verlag, 1997.

Received on October 2, 2009.

Accepted on May 11, 2010.

License information: This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.