

# On a collection of blenniid fishes from Mauritania, with a redescription of *Spaniblennius rioudourensis* (Metzelaar, 1919)\*

H. Bath & P. Wirtz

Bath, H. & P. Wirtz. On a collection of blenniid fishes from Mauritania, with a redescription of *Spaniblennius rioudourensis* (Metzelaar, 1919).

Zool. Med. Leiden 66 (13), 31.vii.1992: 265-276, figs. 1-16, tables 1-2. — ISSN 0024-0672.

Key words: Blenniidae; *Spaniblennius*; eastern Atlantic.

During the Tyro Mauritania Expedition (1988) of the Nationaal Natuurhistorisch Museum (formerly Rijksmuseum van Natuurlijke Historie) Leiden, six species of Blenniidae were caught at the coast and on the shelf of Mauritania, off the Banc d'Arguin. Additional specimens of *Spaniblennius rioudourensis* (Metzelaar, 1919), previously known only from the holotype, allow to more fully describe the species and the genus *Spaniblennius* Bath & Wirtz, 1989. New records of *Parablennius pilicornis* (Cuvier, 1829), *Parablennius goreensis* (Valenciennes, 1836), *Lipophrys velifer* (Norman, 1935), *Lipophrys pholis* (Linnaeus, 1758), and *Blennius normani* Poll, 1949, present extensions of the known ranges of these species. The coasts of Mauritania appear to represent a region where some northern species have their southern limit and some southern species have their northern limit in the eastern Atlantic.

Hans Bath, Luisenstr. 45, D-6780 Pirmasens, Germany.

Peter Wirtz, Universidade da Madeira, Largo do Colégio, P-9000 Funchal, Portugal.

## Introduction

In 1988 during the TYRO Mauritania Expedition of the Nationaal Natuurhistorisch Museum (formerly Rijksmuseum van Natuurlijke Historie) Leiden, six species of the fish family Blenniidae were caught off the Banc d'Arguin and at Cap Blanc, Mauritania. All of these records extend the known range of the species concerned. *Spaniblennius rioudourensis* (Metzelaar, 1919), hitherto known only from the holotype, is redescribed on the basis of 12 additional specimens. These specimens also serve to give an expanded definition of the genus *Spaniblennius* Bath & Wirtz, 1989.

We are grateful to M.J.P. van Oijen (RMNH) for the loan of the specimens and to W. Kolvoort for photos of live animals.

## Methods

Specimens were measured with calipers to 0.1 mm accuracy. For the description of skeletal features, all specimens were x-rayed. Fig. 1 shows the arrangement and nomenclature of the head pore system of blennies, which will be referred to in the text. Fig. 2 shows the types of lateral line systems found in blennies. The terminology follows Springer (1968). Names of institutes are abbreviated in the following way: RMNH = Nationaal Natuurhistorische Museum, Leiden, ZMA = Zoologisch Museum, Amsterdam.

---

\*) CANCAP-project contribution no. 101

## Results

*Spaniblennius* Bath & Wirtz, 1989

(figs. 1-2)

*Spaniblennius* Bath & Wirtz, 1989: 278; type species: *Blennius rioudourensis* Metzelaar, 1919.

Revised genus diagnosis.— Teeth incisiform and uniform, in a single row. Single teeth movable, but not the whole tooth row. Replacement teeth encased by jaw bones. Number of teeth in upper jaw 21-35, in lower jaw 19-29. At the rear of both tooth rows at both sides a slightly recurved canine tooth (and frequently a small replacement canine tooth). No teeth on vomer. Dentalia connected by a suture (*sutura serrata*). Processus ascendens of the premaxillary separated from the median ethmoid by a gap. Five circumorbital bones. Supraorbital tentacles present. Lap-like skin flaps on the nape present or absent (present in *S. rioudourensis*, absent in *S. clandestinus*). Lap-like skin flap directly above insertion of pectoral fins; size variable. Small tentacle on the rear edge of the anterior nostril. Gill membranes fused to isthmus but forming a fold of variable depth across the throat. Number of pores of the lateral line canal system in the head region almost constant (fig. 1): 3 pores in the pars mandibularis of the canalis opercularis and 9 circumorbital pores. Lateral line canal consisting of short pieces of separate tubes (fig. 2, type E). Dorsal fin X 14-17; segmented part higher than unsegmented part; last ray of dorsal fin connected to caudal peduncle by fin membrane. Anal fin II 15-17. Pectoral fin has 13 rays. Ventral fin I 3. The caudal fin normally has 11 rays (12 in two specimens), the median 7 to 8 of them branched twice; number of procurrent rays of caudal fin 3-4 dorsally and 2-3 ventrally. The postcleithra consist of two elongated bones, the head of the ventral one overlapping the end of the dorsal one. The first upper ray of the caudal fin articulates between the hypuralia minima and the hypural plate + urostyle. Two epuralia. Vertebrae 10 (abdominal) + 21-23 (caudal). Anal spines of males slightly enlarged, without onion-shaped glands. Tips of segmented dorsal rays of *S. rioudourensis* males enlarged to spatulate glands, presumably only during the spawning season.

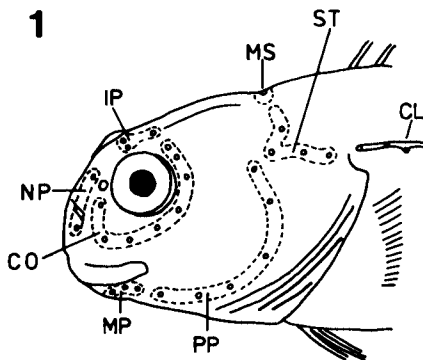


Fig. 1. Schematic drawing of the lateral line system in the head region: IO = interorbital pores, NP = prenasal pores, CO = circumorbital pores, MP = mandibular pores, PP = praeopercular pores, ST = supratemporal pores, MS = median supratemporal-commissural pore, CL = canalis lateralis. The pore above the articular is counted as a praeopercular pore.

At present, the genus contains two species: *Spaniblennius rioudourensis* (Metzelaar, 1919) and *Spaniblennius clandestinus* Bath & Wirtz, 1989. The latter species is known only from the male holotype. In a collection of shore fishes from Angola housed at the Museu Bocage, Lisbon, there is a female specimen possibly belonging to this species, though differing in some respects; right now it is impossible to state whether these differences are sex-related or whether this female belongs to a third species of *Spaniblennius*.

***Spaniblennius rioudouensis* (Metzelaar, 1919)**  
(figs. 3-11, table 1)

*Blennius rioudouensis* Metzelaar, 1919: 291; holotype ZMA 102.173, Rio d'Ouro (in former Spanish Sahara).  
*Spaniblennius rioudouensis*; Bath & Wirtz, 1989: 278.

Material.— Holotype ZMA 102.173, Rio d'Ouro and 12 specimens from off Banc d'Arguin, Mauritania: RMNH 31600: 2 ♂♂, 1 ♀, sta. MAU 110, 20°30'N 17°05'W, depth 22 m, 18.vi.1988; SMF 18057: 1 ♂, sta. MAU 119, 20°25'N 17°06'W, depth 17 m, 19.vi.1988; RMNH 31601: 1 ♂, 3 ♀♀, same data; RMNH 31602: 2 ♂♂, 2 ♀♀, sta. MAU 122, 20°27'N 17°15'W, depth 32 m, 19.vi.1988.

Description.— A species of *Spaniblennius* with X spines and 15-16 (rarely 17) rays in the dorsal fin. Unsegmented part of the dorsal fin lower than segmented part. Pectorals with 13, caudal fin with 11 (rarely 12) rays. Three pores in the pars mandibularis of the canalis opercularis. Lap-like skin flaps on the nape present. Lap-like skin flap directly above insertion of pectoral fins. Tips of segmented dorsal rays enlarged to spatulate glands; presumably only during the spawning season. See table 1 (p. 276) for the counts and measurements on the 12 specimens from Mauritania.

Body moderately elongated and laterally compressed. Head distinctly broader than body; profile between lips and eyes straight or slightly concave. The height of the upper lip corresponds to its distance to the lower edge of the eyes. Interorbital space narrow and concave. Gill opening wide and reaching ventrally down to the base of the ventral fins, fused to the isthmus but forming a fold across it. The depth of this fold (at the median point) varies from 7.5 to 18 % of the head length (average 13.5%).

Supraorbital tentacle usually bifurcated into a larger anterior branch and a smaller

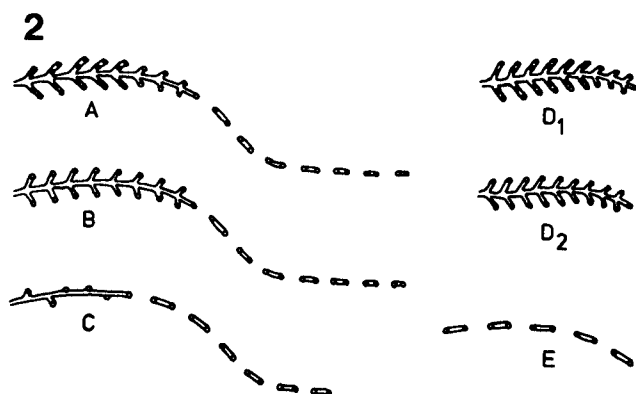
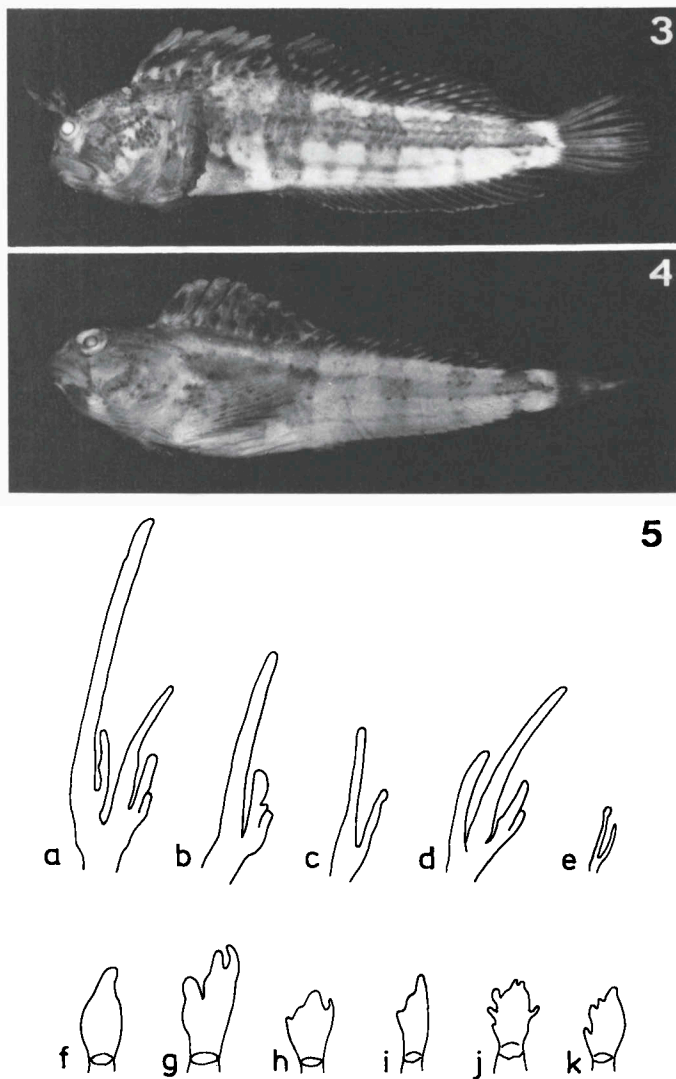


Fig. 2. Schematic drawing of the types of lateral line systems. A: Anterior part with paired side branches ending with two or more pores at the surface. B: Anterior part with paired side branches ending with a single pore at the surface. C: Anterior part without paired side branches; pores in central branch; posterior part consists of short pieces of separate tubes or absent. D1: Anterior part with paired side branches usually ending with several pores at the surface; no posterior part consisting of short pieces of separate tubes. D2: Anterior part with paired side branches ending with a single pore at the surface. E: Consisting of a few short pieces of separate tubes.

posterior branch; both may bear small side-branches of variable size at their rear edge (figs. 5 a-e). In one specimen the main, median branch has an anterior and a posterior side-branch (fig. 5 d). The length of the supraorbital tentacles varies between 2.4 and 7.7 mm in males and between 0.8 and 1.2 mm in females.

The lower nasal openings are situated at the level of the lower edge of the eyes and form a small tube. At the rear edge of the opening of this tube a broad, lap-like tentacle of variable shape arises (fig. 5 f-k). The upper nasal openings are



Figs. 3-5. *Spaniblennius rioudourensis* (Metzelaar), Mauritania, off Banc d'Arguin; fig. 3, ♂, TL 65.0 mm; fig. 4, ♀, TL 65.8 mm; fig. 5, a-e: right supraorbital tentacle; f-k: right nasal tentacle; a) ♂, TL 65.0, ST 7.7; b) ♂, TL 56.5, ST 3.3; c) ♂, TL 51.8, ST 5.9; d) ♂, TL 52.3, ST 4.5; e) ♀, TL 65.8, ST 1.1; f) ♂, TL 65.0, NT 0.8; g) ♂, TL 56.5, NT 0.9; h) ♂, TL 52.3, NT 0.7; i) ♂, TL 51.8, NT 0.9; j) ♀, TL 65.8, NT 0.8; k) ♀, TL 54.0, NT 0.7. TL = total length of specimen, ST = length of supraorbital tentacle, NT = length of nasal tentacle (all in mm).

temporal pores, 1 median supratemporal-commisural pore. One specimen has only 2 interorbital pores.

The dorsal fin begins halfway between the rear edge of the eyes and the base of the pectorals. The spinous part is lower than the segmented part and there is a moderate

cone-shaped and prominent and situated at approximately the level of the middle of the eyes.

The nape tentacles, present in all specimens, are situated halfway between the median supra-temporal commissural pore and the beginning of the dorsal fin (fig. 7). There is no obvious difference between males and females in this character. The colour of the tentacles is a milky white.

Upper and lower jaws bear a row of uniform, slender, incisiform teeth, decreasing in size towards the posterior end, and numbering 21-35 in the upper jaw and 19-28 in the lower jaw. At the end of both tooth rows on each side a small to medium sized canine tooth. No teeth on vomer. The lateral line canal consists of 6-12 short pieces of separate tubes reaching as far back as spine VII or ray 9 of the dorsal fin (fig. 2, type E). The number and distribution of pores in the lateral line system of the head (fig. 1) is constant: 3 interorbital pores, 2 praenasal pores, 9 circumorbital pores, 3 mandibular pores, 6 praeopercular pores, 3 supra-

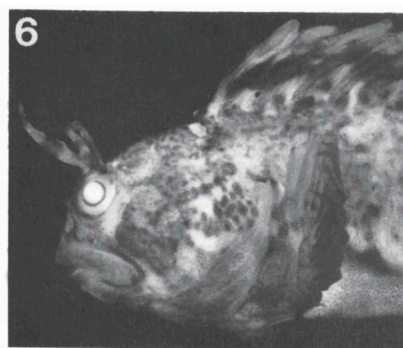
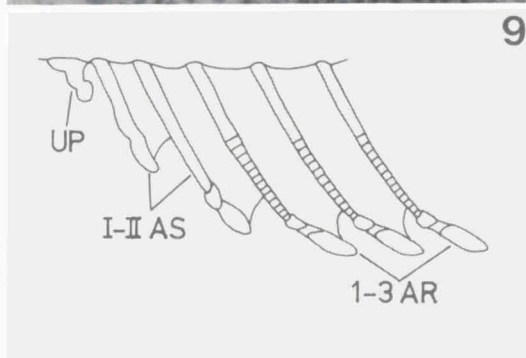
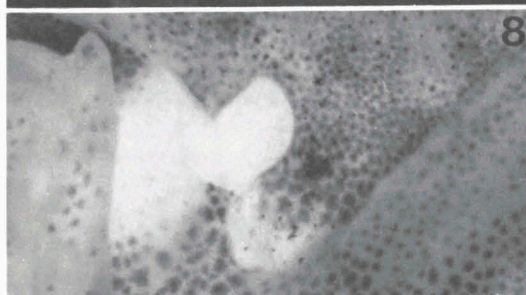


Fig. 6. *Spaniblennius rioudourensis* (Metzelaar), ♂, lateral view of head.

indentation between the two parts: the fin membrane connects the last spine to the first ray at about  $\frac{2}{5}$ - $\frac{2}{3}$  of the height of the latter. The tip of the last spine does not reach the edge of the fin membrane. Adult males have spear blade shaped glands at the tips of the anterior nine spines (figs. 3, 6). The last rays of the dorsal and anal fin are connected with the caudal peduncle by fin membrane, the membrane of the dorsal fin reaching the procurrent rays of the caudal fin, the membrane of the anal fin not reaching the procurrent rays of the caudal fin. Pectoral fin rays segmented and unbranched, the lower five forming hooks. Longest pectoral fin rays reach as far back as the second or third anal ray. On the dorsal side of the pectoral fin base projects a lap-like skin flap of milky white colour (fig. 8). The anal fin starts at the height of the tenth spine of the dorsal fin. The tips of anal spines and rays of males bear glands, as shown in fig. 9.

Colour (alcohol specimens).— Head and body light yellowish brown. Snout region, middle of upper lip in particular, lighter. Snout region with brown confluent



Figs. 7-10. *Spaniblennius rioudourensis*; (Metzelaar), fig. 7, ♂, TL 65.0 mm, nuchal skin flap; fig. 8, ♂, TL 65.0 mm, pectoral skin flap; fig. 9, ♂, glands at the tips of the anal fin rays; fig. 10, ♂, TL 56.5 mm, RMNH 31602, spot between first and second dorsal spine. UP = urogenital papilla, AS = anal spines, AR = anal rays.



Fig. 11. *Spaniblennius rioudourensis* (Metzelaar), ♂, Mauritania, off Banc d'Arguin. Photo of live animal by W. Kolvoort.

spots. Nape and cheeks medium brown; opercular region lighter. Nape and upper opercular region with small diffuse spots. Middle third of lower lip and chin brown. On the anterior throat area a broad brown band starting below the posterior third of the lower lip and forming an obtuse angle pointing towards the posterior; the area between the chin and this band milky white. In some specimens, the angular band merges into a brown area on the lower rear of the head up to the rear edge of the opercular membrane. Supraorbital tentacles alternately light and dark, the base and the tip usually dark.

Five medium brown bands on the body, the ventral ends directed slightly anterior. These bands are less wide than the spaces between them. The last band in front of the caudal fin usually rhomboid. The edges of these bands frequently somewhat darker, especially on the lower half of the body. Along the lateral line the edges of these bands (and sometimes the area in the middle between them) form roundish dark brown spots. Above the lateral line the vertical bands are connected by a broad light brown longitudinal stripe.

The brown colour of the vertical bands extends onto the basal area of the dorsal fin. Spinous part of dorsal fin light brownish purple to white; brown spots on the fin rays arranged in four to five oblique rows. Elongated black spot on the distal half of the fin membrane between the first and second spine with a transparent margin on the sides and on the lower edge (fig. 10). Anal fin dark grey; tips of the fin rays white. Pectorals gray-brown, ventrals light grey at the base, increasingly dark brown towards the tips. Caudal fin grey-brown, occasionally more or less distinctly banded.

Photos of living animals taken shortly after capture (e.g. fig. 11) show a generally light brown body. The tips of the dorsal spines of males, the nuchal skin flaps and the pectoral skin flaps are conspicuously white. The function of these skin flaps in the genera *Blennius* and *Spaniblennius* was entirely unclear until now, but their contrasting colour in live *Spaniblennius rioudourensis* strongly suggests a signal function.



**Blennius normani** Poll, 1949

(fig. 12)

*Blennius normani* Poll, 1949: 245; holotype IRSNB 93, au sud de l'embouchure du Congo, au large d'Angola.

Material.— 5 specimens from off the Banc d'Arguin, Mauritania: RMNH 31605: 1 ♂, sta. MAU 094, 19°32'N 17°01'W, depth 110 m, 15.vi.1988; RMNH 31606: 1 ♂, sta. MAU 095, 19°31'N 17°02'W, depth 200-110 m, 15.vi.1988; RMNH 31607: 1 ♂, 2 ♀♀, sta. MAU 080, 20°02'N 17°26'W, depth 60-70 m, 14.vi.1988.

Total length of specimens 78-117 mm. Dorsal fin XI 13-14 (one specimen 13, four specimens 14), anal fin II 15-16 (one specimen 16, four specimens 15). Caudal fin 13, the median 8-9 (usually 9) branched; procurrent rays dorsally 3-5, ventrally 2-4. Vertebrae 11 + 20-21 (one specimen 20). Two epuralia, one hypurale minimale. Pleuralia on precaudal vertebrae 3-11. Last epipleuralia on caudal vertebrae 6-7. Lateral line on the body consists of 11-14 short pieces of tubes reaching as far back as rays 6-13 of the dorsal fin (fig. 2, type E). Nuchal skin flaps absent in all five specimens. For an additional description of the species see von Helden and Wirtz (1985).

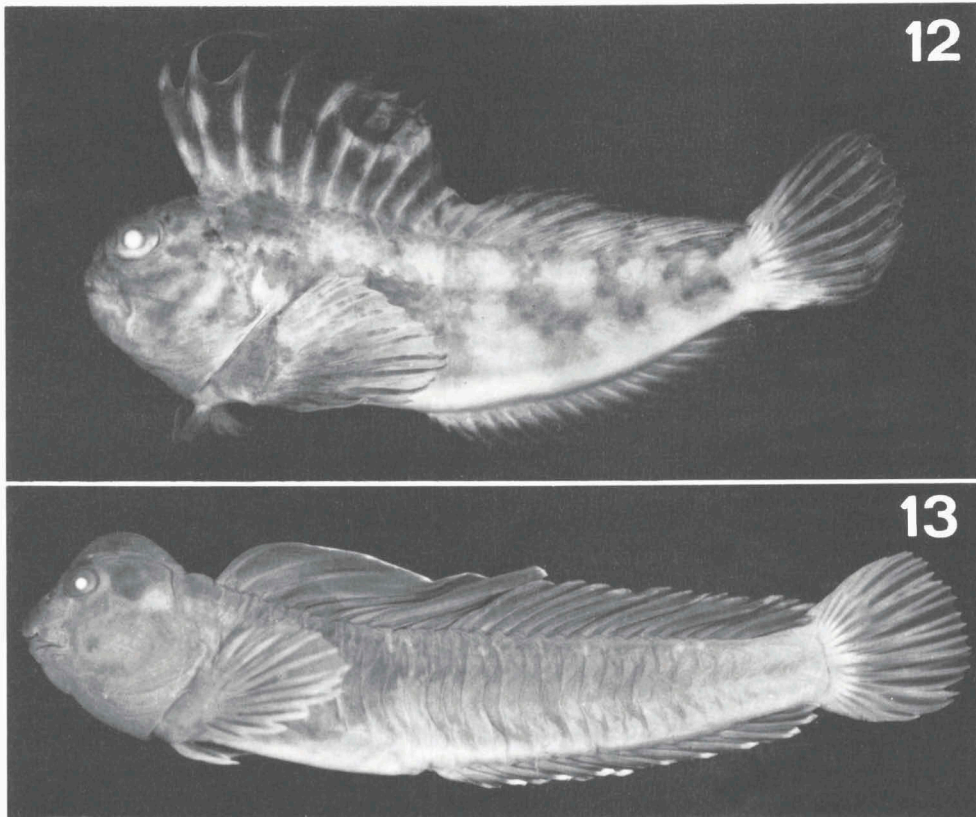


Fig. 12. *Blennius normani* Poll, ♂, TL 117.5 mm, Mauritania, off Banc d'Arguin. Fig. 13. *Lipophrys velifer* ♂, TL 51.5 mm, Mauritania, East coast of Cap Blanc.

**Lipophrys pholis** (Linnaeus, 1758)

*Blennius pholis* Linnaeus, 1758: 257.

*Lipophrys pholis*; Bath, 1977: 192.

*Pholis laevis* Fleming, 1828: 207.

*Pholis carolinus* Valenciennes (in Cuvier & Valenciennes), 1836: 276; syntypes: MNHM A.2101, coast of Carolina.

*Pholis bufo* Lowe, 1843: 87; syntypes BMNH 1863.9.10.12-14, Madeira.

Material.— 2 specimens from the East coast of Cap Blanc, Mauritania: RMNH 31603: 1 ♂, 1 ♀, sta. MAU 007, 20°47'N 17°03'W, littoral zone, 7.vi.1988.

Total length of specimens 48.8 and 55.2 mm. Dorsal fin XII 18, anal fin II 18-19, pectorals 13/13, ventrals I 3, caudal fin 13 (the middle 7-8 branched) with 5-6 dorsal procurrent rays and 5 ventral procurrent rays. Tentacle on the rear edge of the anterior nostril consisting of 6 small threads. The lateral line on the body consists of a continuous tube reaching back to spine 9 of the dorsal fin plus 15-17 short pieces of tubes reaching back to dorsal rays 11-13 (fig. 2, type C).

**Lipophrys velifer** (Norman, 1935)

(fig. 13)

*Blennius velifer* Norman, 1935: 19; holotype and paratypes BMNH 1935.5.11.184-193, Elephant Bay, Angola.

*Lipophrys velifer*; Bath, 1977: 193, fig. 41.

*Blennius elongatus* Cadenat, 1950: 272; no type material indicated.

Material.— 9 specimens from the East coast of Cap Blanc, Mauritania: RMNH 31604: 4 ♂♂, 5 ♀♀, sta. MAU 007, 20°47'N 17°03'W, littoral zone, 7.vi.1988.

Total length of specimens 35.6-57.8 mm. Dorsal fin XII 15-16, anal fin II 16-18 (one specimen with 16, one with 18), pectorals 12/12, ventrals I 3, caudal fin 13 (the middle 7-9 branched) with 4-6 dorsal procurrent rays and 4-5 ventral procurrent rays. Vertebrae 10+24. The lateral line on the body consists of a short continuous tube reaching back to spine 4 of the dorsal fin plus 9-10 short pieces of tubes reaching back to spine 9 to first dorsal ray 1 (fig. 2, type C). Lateral line system on the head (fig. 1): 3 interorbital pores, 2 praenasal pores, circumorbital pores 6 (in seven specimens) or 7 (in two specimens), 3 mandibular pores, 6 praeopercular pores, supratemporal pores 3 (one specimen) or 4 (eight specimens), 1 median supratemporal-commissural pore. Wirtz and Bath (1982) gave a detailed comparison of this species with the closely related *Lipophrys bauchotae* Wirtz & Bath, 1982. Fig. 13 shows the typical dark spot behind the eye and the white edge of the first dorsal fin of males of this species.

**Parablennius goreensis** (Valenciennes, 1836)

(figs. 14-16, table 2)

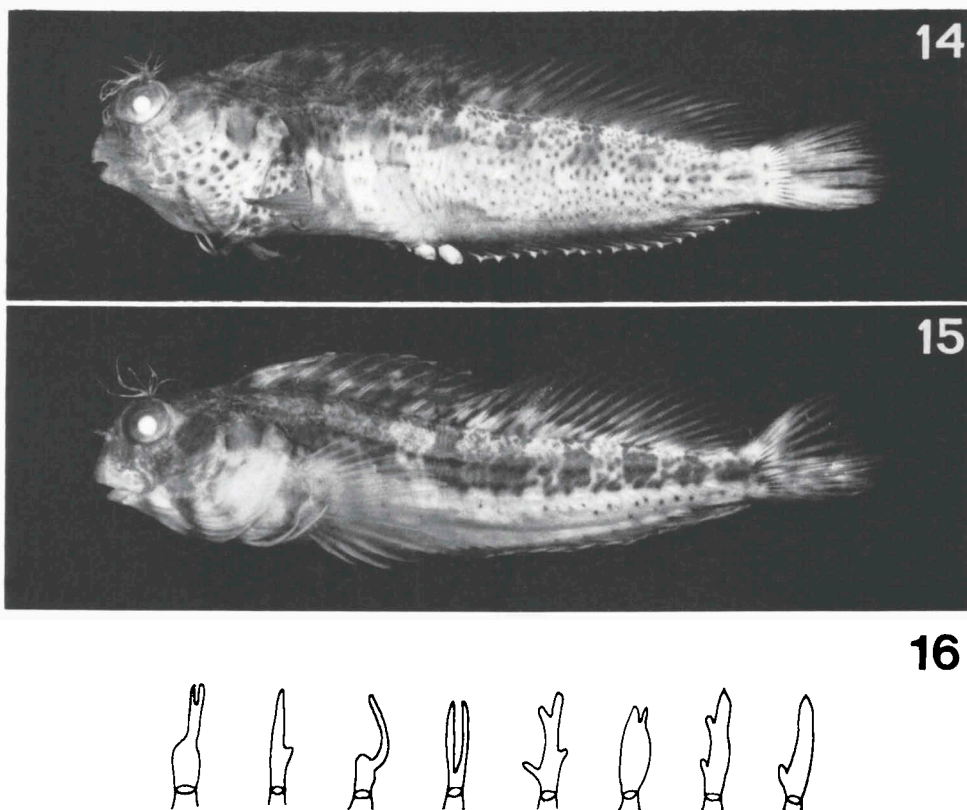
*Blennius goreensis* Valenciennes (in Cuvier & Valenciennes), 1836: 255, holotype MNHN 6226, Gorée.

*Parablennius goreensis*; Bath, 1977: 197.



Material.— Off Banc d'Arguin, Mauritania: RMNH 31608: 3 ♂♂, 4 ♀♀, sta. MAU 118, 20°25'N 17°04'W, depth 17 m, 19.vi.1988; RMNH 31610: 2 ♂♂, 3 ♀♀, same data; RMNH 31609: 6 ♂♂, 1 ♀, sta. MAU 119, 20°25'N 17°06'W, depth 17 m, 19.vi.1988.

Sizes of specimens and fin ray counts are given in table 2 (p. 276). Ventrals I 3, with the third ray very thin, closely aligned to but not connected with fin membrane to the second ray and 1/2-3/5 as long as the second ray. Lateral line type D1-D2 (fig. 2): D1 or D2 in small and medium-sized specimens, D1 in large specimens. Tentacle on the rear edge of the anterior nostril quite variable in shape (fig. 15). A detailed description of this species is given in Bath (1990). Compared to the previously known specimens of the species, which were all caught in shallow water close to the shore or in tidal pools, the specimens from Mauritania have a lighter body colour possibly correlated with depth (17 m) and/or bottom type (yellow sand and shell gravel).



Figs. 14-16, *Parablennius goreensis* (Valenciennes), Mauritania, off Banc d'Arguin; fig. 14, ♂, TL 68.5 mm, fig. 15, ♀, TL 67.7 mm; fig. 16, id., various types of tentacles on the rear edge of the posterior nostril.

**Parablennius pilicornis** (Cuvier, 1829)

*Blennius pilicornis* Cuvier, 1829: 237, no type material; Valenciennes (in Cuvier & Valenciennes), 1836: 254, redescription based on MNHN A.1867, A.1868, A.1869, Rio de Janeiro.

*Parablennius pilicornis*; Bath, 1977: 197.

*Blennius pantherinus* Valenciennes (in Cuvier & Valenciennes), 1836: 262, holotype MNHN A.1843, coast of Brazil.

*Blennius filicornis*; Günther, 1861: 216, erroneous spelling.

*Blennius ater* Sauvage, 1882: 172, holotype MNHN A.4268, Patagonia.

*Blennius niger* Metzelaar, 1919: 290, holotype ZMA 102.170, Rio d'Ouro.

*Blennius fascigula* Barnard, 1927: 834, holotype SAM 17173, 37, coast of South Africa.

*Blennius trifascigula* Fowler, 1935: 505, holotype ANSP 63933, Durban, Natal.

*Blennius vandervekeni* Poll, 1959: 66, holotype IRSNB 375, paratype MRAC 126645, Bay of Lobito, Angola.

Material.— Off Banc d'Arguin, Mauritania: RMNH 31611: 1 ♂, sta. MAU 118, 20°25'N 17°04'W, depth 17 m, 19.vi.1988; RMNH 31612: 1 ♂, 1 ♀, sta. MAU 119, 20°25'N 17°06'W, depth 17 m, 19.vi.1988.

Total length of specimens 68.5-79.0 mm. Dorsal fin XII 21-22, Anal fin II 22-23, pectorals 14/14, ventrals I 3, caudal fin 13 (the middle nine branched) with 7 dorsal procurrent rays and 6-7 ventral procurrent rays. Vertebrae 11+28. Lateral line type D2 (fig. 2). A detailed description of this species was given by Bath (1966; 1990). The colour pattern of the specimens from Mauritania corresponds to that shown by Bath (1966: figs. 5-6).

**Discussion**

The records of all six species of Blenniidae caught during the RMNH TYRO Mauritania Expedition provide extensions of the known ranges of these species. The only previously known specimen of *Spaniblennius rioudourensis* came from "Rio de Oro" (Metzelaar, 1919), i.e. probably from north of the place where the 12 additional specimens have been caught.

Specimens of *Parablennius pilicornis* and of *Parablennius goreensis* were found at the same site. This shows that, contrary to Bath's (1990) supposition, the two species can occur sympatrically. According to present knowledge, there is a gap in the distribution of *Parablennius pilicornis* from Mauritania to Mocamedes, Angola. The records of the species from Mauritania present the southernmost known occurrence of the northern population of this species. The northernmost records of *Parablennius goreensis* were from the Cape Verde peninsula, Senegal. The occurrence of the species at Mauritania extends its known range slightly to the north. The same applies to *Lipophrys velifer*, previously not known to occur north of the Cape Verde peninsula (Wirtz 1980). The capture of *Blennius normani* at Mauritania slightly extends the previously known range of the species to the north (von Helden & Wirtz, 1985). The southernmost record of *Lipophrys pholis* had previously been from the Canary Islands (Dooley et al., 1985). The coasts of Mauritania appear to represent a region where some northern species have their southern limit and some southern species have their northern limit in the eastern Atlantic.

## References

- Barnard, K.H., 1927. A monograph of the marine fishes of South Africa.— *Ann. S. Afr. Mus.* 21: 1-1065.
- Bath, H., 1966. Erstmalsiger Nachweis von *Blennius vandervekeni* Poll 1959 im Mittelmeer.— *Senckenbergiana biol.* 47: 411-417.
- Bath, H., 1977. Revision der Blenniini (Pisces: Blenniidae).— *Senckenbergiana biol.* 57: 167-234.
- Bath, H., 1990. Taxonomie und Verbreitung von *Parablennius* Ribeiro 1915 an der W-Küste Afrikas und den Kapverdischen Inseln mit Revalidation von *P. verruckeni* (Poll 1959) und Beschreibung drei neuer Arten.— *Senckenbergiana biol.* 70: 15-69.
- Bath, H. & P. Wirtz, 1989. *Spaniblennius clandestinus* n.g., n.sp. der Tribus Blenniini.— *Senckenbergiana biol.* 69: 277-291.
- Cadenat, J., 1950. Poissons de mer du Sénégal.— *Init. Afr.* 3: 1-345.
- Cuvier, G., 1829. *Le Règne animal distribué à après son organisation, pour servir de base à l'histoire naturelle des animaux et d'introduction à l'anatomie comparée* (Nouvelle édition). Poissons 2: 122-406.— Paris.
- Cuvier, G. & M.A. Valenciennes, 1836. *Histoire naturelle des Poissons* 11: 1-508.— Paris.
- Dooley, J.K., J. van Tassel & A. Brito, 1985. An annotated checklist of the shorefishes of the Canary Islands.— *Amer. Mus. Nov.* 2824: 1-49.
- Flemming, J., 1828. *A history of British animals exhibiting the descriptive characters and systematical arrangements of the genera and species of quadrupeds, birds, reptiles, fishes, mollusca and radiata of the U.K.; including the indigenous, extirpated and extinct kinds, together with periodical and occasional visitants*, i-xxiii, 1-565.— Edinburg-London.
- Fowler, H.W. 1935. South African fishes received from Mr. H.W. Bell-Marley in 1935.— *Proc. Acad. nat. Sci. Philad.* 87: 361-408.
- Günther, A., 1861. *Catalogue of the Acanthopterygian Fishes in the collection of the British Museum* 3: i-xxv, 1-586.— London.
- Helden, L. von & P. Wirtz, 1985. A comparison of *Blennius ocellaris* L. 1758, *B. riourenses* Metzelaar 1919, and *B. normani* Poll 1949 (Pisces, Blenniidae).— *Spixiana* 8(2): 197-217.
- Linnaeus, C., 1758. *Syst. Nat.*, ed. 10: 1-823.— Stockholm.
- Lowe, R.T., 1843. Notices of fishes newly observed or discovered in Madeira during the years 1840, 1841 and 1842.— *Proc. zool. Soc. Lond.* 11: 81-95.
- Metzelaar, J. 1919. *Over tropische atlantische Visschen*: 314.— Amsterdam (Dissertation).
- Norman, J.R. 1935. *Coast Fishes I. The South Atlantic*.— *Discovery Rep.* 12: 1-58.
- Poll, M., 1949. Poissons (XIe, XIVE et XVIIIe croisières). In: *Résultats scientifiques des croisières du Navire - Ecole Belge "Mercator"*. IV.— *Mem. Inst. r. Sci. nat. Belg.* (2)33: 173-269.
- Poll, M., 1959. Poissons. V. Téléostéens Acanthopterygiens.— *Résult. Expéd. Belge Atl. Sud* (3b): 1-417.
- Sauvage, H.E., 1882.— *Bull. Soc. Philom.* (7) vi: 172.
- Springer, V.G., 1968. Osteology and classification of the fishes of the family Blenniidae.— *Bull. U.S. Nat. Mus.* 284: 1-85.
- Wirtz, P., 1980. A revision of the eastern-atlantic Triperygiidae (Pisces, Blennioidei) and notes on some westafrican Blennioid fish.— *Cybium*, 3e série, 11: 83-101.
- Wirtz, P. & H. Bath, 1982. *Lipophrys bauchotae* n.sp. from the eastern tropical Atlantic (Pisces: Blenniidae).— *Senckenbergiana biol.* 62: 225-232.
- Wirtz, P. & H. Bath, 1989. *Lipophrys caboverdensis* n.sp. from the Cape Verde Islands (Pisces: Blenniidae).— *Senckenbergiana biol.* 69, 15-27.

Received: 11.vi.1990

Accepted (after revision and translation): 3.v.1991

Edited: J.C. den Hartog & M.J.P. van Oijen

Table 1. Counts and measurements (in mm) on specimens of *Spaniblennius riourensis* from Mauritania.

	sex	total length	standard length	head length	eye diameter	interorbital distance	dorsal fincounts	anal fincounts	caudal rays	caudal vertebrae
RMNH 31600	♂	65.0	53.0	14.5	3.1	1.3	X 17	II 17	4/6+6/3	23
RMNH 31600	♂	56.8	46.2	13.6	3.6	1.3	X 15	II 16	4/6+5/3	22
RMNH 31602	♂	56.5	44.9	13.1	3.8	1.3	X 16	II 16	4/6+6/3	22
RMNH 31602	♂	52.3	42.7	12.0	3.5	1.1	X 15	II 16	4/6+5/3	22
SMF 18057	♂	50.8	41.5	12.0	3.0	1.2	X 15	II 15	4/6+5/3	22
RMNH 31601	♂	37.2	29.7	8.7	2.5	0.9	X 15	II 16	3/6+5/3	22
RMNH 31600	♀	65.8	54.6	15.7	4.0	1.5	X 16	II 15	4/6+5/3	23
RMNH 31602	♀	54.0	44.3	13.2	3.7	1.5	X 15	II 15	4/6+5/3	21
RMNH 31601	♀	46.2	38.3	11.0	3.3	1.2	X 16	II 16	4/6+5/3	22
RMNH 31602	♀	45.8	37.2	10.0	3.1	0.9	X 15	II 15	4/6+5/3	22
RMNH 31601	♀	43.0	35.8	10.2	2.7	1.1	X 15	II 15	4/6+5/3	22
RMNH 31601	♀	38.4	32.1	9.8	2.8	1.0	X 15	II 15	4/6+5/3	21

Table 2. Counts and measurements (in mm) on specimens of *Parablennius goreensis* from Mauritania.

	sex	total length	standard length	head length	eye diam.	interorb. distance	dorsal fincounts	anal fincounts	pectoral rays	caudal rays	caudal vertebrae
RMNH 31610	♂	71.7	60.6	17.5	4.5	1.2	XII 18	II 20	14/14	7/7+6/6	26
RMNH 31609	♂	71.2	59.7	16.4	4.5	1.2	XI 19	II 19	14/14	7/7+6/6	26
RMNH 31609	♂	70.8	58.8	16.5	4.6	1.2	XII 18	II 20	13/12	6/7+6/5	26
RMNH 31608	♂	70.8	59.6	16.7	4.5	1.0	XII 18	II 20	14/14	6/7+6/6	26
RMNH 31510	♂	70.5	60.0	17.4	4.4	1.1	XII 18	II 20	14/14	7/7+6/6	26
RMNH 31609	♂	69.8	58.0	16.9	4.6	1.0	XII 18	II 20	14/14	6/7+6/6	26
RMNH 31609	♂	69.6	58.8	15.8	4.6	1.1	XIII 18	II 21	13/14	7/7+6/6	27
RMNH 31608	♂	68.5	57.4	16.8	4.6	1.1	XII 19	II 20	14/14	7/7+6/6	26
RMNH 31609	♂	65.0	54.8	15.3	4.4	1.2	XII 18	II 20	14/14	7/7+6/6	26
RMNH 31609	♂	64.0	53.2	14.6	4.4	1.2	XIII 18	II 20	14/14	7/7+6/6	26
RMNH 31608	♂	60.2	50.0	14.3	4.2	1.1	XII 18	II 20	14/14	6/7+6/6	26
RMNH 31609	♀	75.2	63.5	18.3	4.8	1.5	XII 18	II 20	14/14	7/7+6/6	26
RMNH 31608	♀	70.2	53.3	15.0	4.3	1.2	XII 18	II 20	14/14	7/7+6/6	26
RMNH 31608	♀	67.7	55.6	17.2	4.5	1.2	XII 19	II 20	14/14	7/7+6/6	26
RMNH 31610	♀	66.5	56.4	16.3	4.2	1.2	XII 18	II 20	14/14	7/7+6/6	26
RMNH 31608	♀	64.8	55.2	15.6	4.5	1.0	XII 18	II 20	14/14	7/7+6/6	26
RMNH 31610	♀	64.0	54.6	14.5	4.0	1.3	XII 19	II 21	14/14	7/7+6/6	26
RMNH 31608	♀	61.2	51.0	13.7	4.0	1.1	XII 19	II 20	14/14	6/7+6/6	27
RMNH 31610	♀	61.0	50.7	14.0	4.1	1.0	XII 18	II 20	15/15	7/7+6/6	26