

BRIEF COMMUNICATION**Presence of the telescope fish *Mendosoma lineatum* in Patagonian waters, a new species in the ichthyological fauna from the south-west Atlantic Ocean**N. D. BOVCON*†, P. D. COCHIA*, J. RUIBAL NÚÑEZ*‡§, M. VUCICA†
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The presence of the telescope fish *Mendosoma lineatum* in Patagonian waters of Argentina is reported. *Mendosoma lineatum* is the second species of the Latridae recorded in the south-west Atlantic Ocean and its presence in Patagonia is an addition to both the ichthyological fauna of the Argentinean Sea and the south-west Atlantic Ocean.

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The telescope fish *Mendosoma lineatum* Guichenot 1848 is a species, *i.e.* found in the waters of Chile, Australia and New Zealand in the Pacific Ocean (Pequeño, 1980; Kingsford *et al.*, 1989; Roberts, 1991), in the Saint-Paul and Amsterdam islands in the Indian Ocean (Duhamel, 1989) and the islands of Gough and Tristan da Cunha (Gon & Heemstra, 1987; Andrew *et al.*, 1995) in the South Atlantic Ocean. The biology and ecology of this species are not well-known. The maximum recorded total length reached is *c.* 40 cm (Gon & Heemstra, 1987) and the species aggregates in schools of similar-sized individuals. Adults are epibenthic but juveniles school near the surface, where they are probably pelagic (Gon & Heemstra, 1987; Andrew *et al.*, 1995). *Mendosoma lineatum* occurs down to 140 m depth (Roberts, 1991) and also in large tidepools and submerged channels (Froese & Pauly, 2016). They feed on plankton and small fishes (Fenwick, 1978; Andrew *et al.*, 1995). Their eggs have oil globules and

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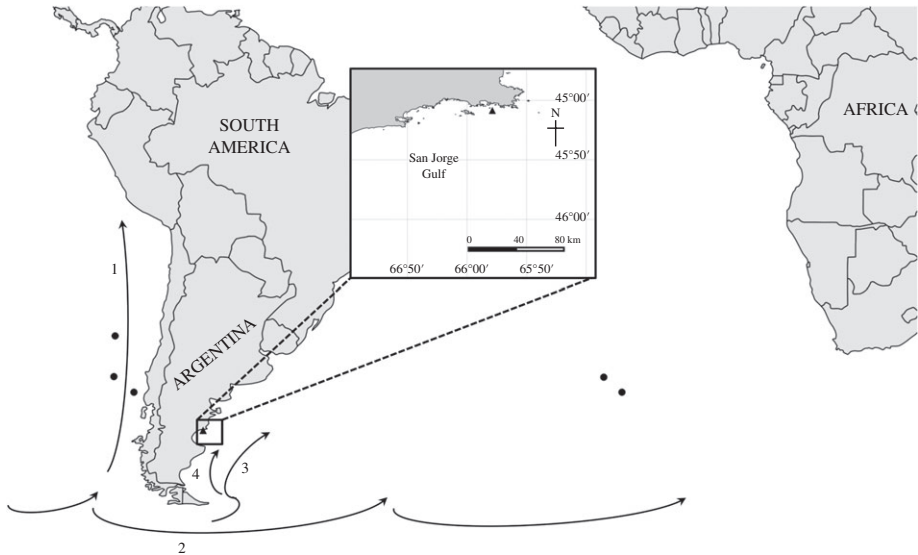


FIG. 1. Locality of *Mendosoma lineatum* caught in coastal waters of Patagonia and the closest previous records (●) of this species from the southern Atlantic and Pacific Oceans. —→, Marine currents: 1, Humboldt Current; 2, Antarctic Circumpolar Current; 3, Falkland Current; 4, Patagonian Coastal Current.

have been found in a very low abundance from spring to autumn on the east coast of the South Island of New Zealand. This period is therefore their probable spawning season (Robertson, 1975).

Through the on-board observers programme of Chubut Province, Argentina, a single specimen of *M. lineatum* was recorded in the by-catch of the Patagonian shrimp (*Pleoticus muelleri*) fishery. The specimen was captured on 3 April 2012 at a depth of 65 m off the coast of Chubut Province (Fig. 1). Specimen identification was based on the criteria proposed by Paulin *et al.* (1989). Muscle tissue samples were taken and preserved in 96% alcohol for future genetic analysis. The specimen was fixed in 10% formalin and then preserved in 70% alcohol in the ichthyological collection at Universidad Nacional de la Patagonia San Juan Bosco, Trelew, Argentina (identification code UNPSJB ICT-2012/72).

External features of the specimen included: elongated and compressed body with a small hump behind the head; eyes with a moderate size and nostrils placed in front of them; a small and highly protrusible mouth; a short and slender caudal peduncle. Its live colour was dark grey to brown above the lateral line and somewhat lighter below it; and pale yellow under the pectoral fins (Fig. 2). The meristic and morphometric measurements taken are given in Table I and follow the criteria proposed by Pequeño (1980) and Gon & Heemstra (1987). In 2012, Waessle & Milessi (2013) recorded the first specimen of striped trumpeter *Latris lineata* (Forster 1801) in coastal waters off Mar del Plata, Argentina (38° 08' S; 57° 15' W). *Latris lineata* and *Mendosoma lineatum* represent the only two species belonging to the family Latridae in the south-west Atlantic Ocean.

Mendosoma lineatum is a species that lives in cold temperate and sub-Antarctic waters (Froese & Pauly, 2016) of southern oceans (Pequeño, 1980; Gon & Heemstra,



FIG. 2. Specimen of *Mendosoma lineatum* (290 mm total length, collection code UNPSJB ICT-2012/72) caught off the coast of Patagonia in the northern part of the San Jorge Gulf, Argentina.

1987; Duhamel, 1989; Kingsford *et al.*, 1989; Roberts, 1991; Andrew *et al.*, 1995). In the Atlantic Ocean the species has an insular distribution and its presence in waters of Patagonia represents the first record on a continental shelf and in the south-west Atlantic Ocean. The Antarctic Circumpolar Current (ACC) flows mainly through the polar and sub-polar waters in a west–east direction and connects the Pacific, Indian and Atlantic Oceans. Between South America and Antarctica the ACC flows through the Drake Passage connecting the Pacific and Atlantic Oceans. The Falkland Current arises from the northern arm of the ACC. When this current goes through the Drake Passage it splits into a main branch that moves in a northern direction along the continental slope and a west branch that helps form the Patagonian Coastal Current, which flows northward along the continental shelf. These currents could be responsible for the occurrence of *M. lineatum* in the south-west Atlantic Ocean (Fig. 1).

TABLE I. Morphometric and meristic measurements of *Mendosoma literatum* (collection code UNPSJB ICT-2012/72) caught in coastal waters of Patagonia

Morphometric character (mm)		Meristic character	
Total length	290	Dorsal-fin rays	XXII-25
Standard length	245	Anal-fin rays	III-17
Head length	62	Pectoral-fin rays	17
Pre-anal length	164	Pelvic-fin rays	6
Predorsal length	65	Scales between origin of dorsal fin and lateral line	5
Dorsal–fin base	154	Scales between origin of anal fin and lateral line	17
Anal–fin base	50	Lateral-line scales	68
Orbital diameter	14		
Inter-orbital space	22		
Pre-ocular distance	20		
Postocular distance	30		
Maxilla + premaxilla length	22.2		
Caudal peduncle maximum height	21		
Pectoral-fin length	55		
Pelvic-fin length	34		

Moreover, in the past 15 years, Patagonian fish surveys have been enhanced by the presence of researchers and on-board observer programmes that monitor fisheries. This monitoring allows the occurrence of rare or infrequent species in the south-west Atlantic Ocean to be recorded. This record of *M. lineatum* in waters of Patagonia not only represents a new species in the ichthyological fauna of the south-western Atlantic Ocean but also confirms the wide distribution of the species in the southern hemisphere. The report of *M. lineatum* near to Pan de Azúcar Island, which belongs to the Parque Interjurisdiccional Marino Costero Patagonia Austral marine protected area in the northern part of the San Jorge Gulf, is an important addition to the knowledge of the ichthyofauna in an area that is already known to harbour high species diversity.

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