

Scientific note

New record of the primnoid gorgonian
Primnoella delicatissima Kükenthal, 1909 for Chilean waters

(Anthozoa, Octocorallia, Primnoidae)

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With 44 genera and approximately 275 species, the family Primnoidae constitutes the fourth largest octocoral family (Cairns & Bayer 2009), and also the family with the deepest living gorgonian species, which occur down to 5850 m (Cairns 2016a). Primnoids are typical deep-water species which are common on seamounts and deep-water coral banks. Due to a phenomenon called

deep-water emergence they can be found in diving depth in channels of Chilean Patagonia (Häussermann & Försterra 2009). In deep-water emergent species the depth ranges are enlarged; they occur from deep to shallow water (Försterra 2009). Eleven species of primnoids have been described from Chile (Van Ofwegen et al. 2009), five of which have been reported from shallow

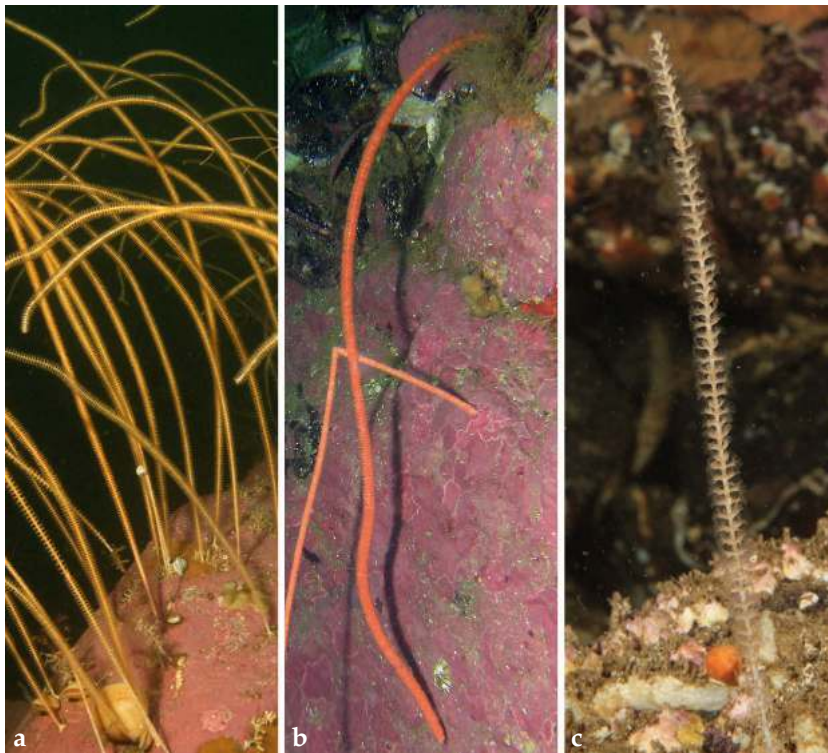


Fig. 1. Sea whips from shallow water of Chilean Patagonia. a. *Primnoella chilensis*, entrance of Cahuelmo Fjord, Comau Fjord, 20 m; b. *Convexella magelhaenica*, Canal Pasaje, 12 m; c. *Primnoella delicatissima*, Caleta Tortuga, Chonos Archipelago, 12 m.

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waters of Chilean Patagonia: *Primnoella chilensis* (Philippi, 1894), *Convexella magelhaenica* (Studer, 1879), *Thouarella koellikeri* (Wright & Studer, 1889), *Thouarella brucei* (Thomson & Richie, 1906) and one undescribed species of *Thouarella* (Van Ofwegen et al. 2009). Both *P. chilensis* and *Thouarella* spp. form so-called animal forests, providing habitat for other marine life (Försterra et al. in press). During the Huinay Fiordos (HF) expeditions, which hoped to inventory the marine life of Chilean Patagonia, some dozens of sea whips, which have the same colonial gross morphology and colour and thus under water resembled the common and widely distributed species *Primnoella chilensis* (41°S–54°S), have been collected and identified by SC. Most of these specimens belonged to the species *P. chilensis*, however, five specimens were identified as *Convexella magelhaenica* (12–27.5 m depth, 48°17'S–55°00'S; also see Van Ofwegen et al. 2009) and two recently collected specimens are *Primnoella delicatissima* Kükenthal, 1909. The latter specimens had been collected at Caleta Tortuga, Northern Patagonian Zone, at 13 m depth on April 4, 2014 (HF21, 45°19.518'S, 73°5.828'W) (USNM 1279400) and at Isla van der Meulen, Central Patagonian Zone, at 12 m depth on April 25, 2015 (HF24, 48°17.406'S, 74°20.150'W), respectively. *P. delicatissima* has been described from 55–103 m from off Brazil from Amapa to off Rio de Janeiro (Cairns 2006) and thus represents a new record for Chilean waters, although quite a disjunct distribution. The species was adequately described and figured by Cairns (2006), although in situ images were not provided.

The genus *Primnoella* consists of 11 species, occurring at depths of 8–1249 m in the western Atlantic, southwestern South America (including Chile), southeastern Australia, New Zealand, and Tasmania (Cairns 2016b). The genus has been recently reviewed by Cairns and Bayer (2009) and Cairns (2006, 2016b). Aside from *P. delicatissima*, two other species occur off Chile: *P. chilensis* (Philippi, 1894) and *P. scotiae* Thomson & Richie,

1906. The latter two species are easily distinguished by having many more scales in both the abaxial and outer lateral polyp rows, more polyps per whorl, and larger polyps.

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