



Two new species of *Diplocirrus* (Polychaeta: Flabelligeridae) from the southern Irish Sea and South Africa

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Abstract

Two new species of *Diplocirrus* Haase, 1915 are described from the southern Irish Sea and South Africa. *Diplocirrus stopbowitzi* sp. nov., identified from several surveys around the Irish Sea in recent years, favors coarser sediments than *D. glaucus* (Malmgren, 1867), the only other species of *Diplocirrus* identified from the area. It is morphologically closest to *D. capensis* Day, 1961 from South Africa, due to a combination of characters (multiarticulated, hooked neurochaetae, cephalic cage absent) that have previously been considered unique to *D. capensis* within the genus. The other new species, *D. incognitus*, is described from material identified by Day as *D. capensis* and deposited in the Natural History Museum, London. In appearance, it approaches *D. glaucus* but differs most noticeably in the relative size of adherent sediment particles and in the length of papillae clustered around the notochaetae. The two new species exhibit characters that bridge the gap between *D. capensis*, previously considered anomalous, and the other members of the genus. The significance of hooked neurochaetae is discussed following the discovery of such chaetae on specimens of *D. glaucus* and *D. hirsutus*. *Diplocirrus glaucus*, *D. capensis*, and the two new species each possess the same two branchial forms: stout, cuneiform with longitudinal ciliated ridges and cirriform with transverse ciliated rings. Comparisons are also made with the morphologically similar genera *Bradiella* Rullier, 1965 and *Diversibranchius* Buzhinskaja, 1994.

Key words: cephalic cage, hooked neurochaetae, branchiae, papillae, *Bradiella*, *Diversibranchius*

Introduction

Haase (1915) erected a new genus, *Diplocirrus*, for three species—*D. glaucus* (Malmgren, 1867), *D. hirsutus* (Hansen, 1879) and *D. longisetosus* (Marenzeller, 1890)—all previously in the genus *Stylarioides* Delle Chiaje, 1830. The basis for separation was the presence of branchiae of two different sizes and thickness, and the articulated capillary neurochaetae being like the notochaetae, but stouter. *Stylarioides* was later synonymized with *Pherusa* Oken, 1807 by Støp-Bowitz (1948).

Day (1961) emended the generic description in order to include a new species, *D. capensis*, from South Africa. This new species had only a single branchial form, neurochaetae with a minute blunt hook, and no cephalic cage, characters that differed from the other species of the genus. The same species was also later identified from the northwest Atlantic in North Carolina (Day 1973) and the Gulf of Mexico (Milligan 1984).

Diplocirrus erythroporus Gallardo, 1968 was described from Nha Trang, South Viet Nam in the South China Sea. A more recent survey in the Natuna Islands (Al-Hakim & Glasby 2004), also in the