

## Two new species of the cheilostome bryozoan *Cheilopora* from the Aleutian Islands

PIOTR KUKLINSKI<sup>1,2</sup>, ANDREI V. GRISCHENKO<sup>3</sup> & STEPHEN C. JEWETT<sup>4</sup>

<sup>1</sup>Institute of Oceanology, Polish Academy of Sciences, ul. Powstancow Warszawy 55, Sopot 81-712, Poland.  
E-mail: kuki@iopan.gda.pl

<sup>2</sup>Department of Life Sciences, Natural History Museum, London SW7 5BD, United Kingdom

<sup>3</sup>Department of Invertebrate Zoology and Aquatic Ecology, Biological Faculty, Perm State National Research University, Bukirev Street 15, GSP, Perm 614990, Russia. E-mail: gat1971@mail.ru

<sup>4</sup>Institute of Marine Science, University of Alaska Fairbanks, Fairbanks, AK 99775-7220, U.S.A. E-mail: scjewett@alaska.edu

### Abstract

Two new species of *Cheilopora*—*C. peristomata* and *C. elfa*—are described from the shallow water around Adak and Amchitka of the Andreanof and Rat island groups of the Aleutian Islands. Zooids of both new species have cormidial peristomes, composed by the distal (originating from neighbouring zooid) and proximal lappets. In contrast to previously described species, the strongly elevated peristomial lappets defining the secondary orifice confer the overall shape of an incomplete circle with deep U-shaped proximolateral pseudosinuses. Depending on angle of view, this gives a campanuliform or trifoliate outline to the secondary orifice, by which the new species differ from congeners. Together with previous discoveries from the Aleutians, these two new *Cheilopora* species are indicative of incomplete knowledge of the marine biodiversity of the region, including the distinctive character of the bryozoan fauna. There is a need for intensification of taxonomic effort along the island arc.

**Key words:** Bryozoa, taxonomy, new species, *Cheilopora*, cormidial peristome, Aleutian Islands

### Introduction

The Commander–Aleutian Ridge comprises a chain of islands that separates the Bering Sea and the Pacific Ocean and extends for about 2260 km from the tip of the Alaska Peninsula (USA) to the Commander Islands (Russia). Owing to the remote location, scientific investigation is very challenging and sampling is both infrequent and of low intensity. Nevertheless, whenever taxonomic investigations are conducted in the area they yield new species. Recent discoveries include numerous sponges (e.g. Lehnert & Stone 2013, 2014; Lehnert *et al.* 2013, 2014; Stone *et al.* 2011), sea stars (e.g. Clark & Jewett 2010, 2011a,b), a sea anemone (e.g. Eash-Loucks *et al.* 2010) and even a large macroalga (e.g. Kawai *et al.* 2008). Frequent such findings of new taxa may be encountered elsewhere in the global ocean, but seldom in a Boreal ecosystem. The conjecture is that the marine biological inventory of the Aleutian Islands is still very incomplete.

The bryozoan fauna of the Commander–Aleutian Ridge in general has been studied irregularly and published investigations from the area are very patchy. While the fauna of its most western Archipelago, the Commander Islands, has been investigated more or less adequately both in intertidal (Izyumova & Kubanin 1978; Kubanin 1997; Grischenko 2004) and subtidal areas (Kluge 1961, 1962; Gordon & Grischenko 1994; Grischenko 1997; Grischenko *et al.* 2000, 2004a,b; Tilbrook & Grischenko 2004), studies of the enormous stretch of the main groups of the Aleutian Islands are scanty. As Grischenko (2002) reported in his review of bryozoan investigations in the Bering Sea, investigations along the Commander–Aleutian Ridge resulted in records of 144 species for the Commander Islands and 24 species around Unalaska Island. The complete absence of information about bryozoans was noted for other groups of islands along the chain (Grischenko 2002). Although in recent years some records have been added (e.g. Dick 2008; Dick *et al.* 2009, 2011), knowledge about bryozoans from the area is still far from complete.