NEW SPECIES OF CORNUCALANUS FROM THE BERING SEA AND THE
ANTARCTIC AND THE DESCRIPTION OF A CORNUCALANUS INDICUS
SEWELL MALE (COPEPODA, CALANOIDA)

BY

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This paper deals with two new species of the genus Cornucalanus Wolfenden,
1905, viz., Cornucalanus notabilis, described from a female from the Bering Sea,
and C. antarcticus, a new species represented by a female from the Antarctic. The
latter species is close to C. robustus Vervoort but well distinguishable from it by
the structure of the fifth pair of legs. The previously unknown male of Corn-
calanus indicus Sewell is described from male specimens of this species from the
northern part of the Pacific Ocean.

The deep water Calanoida fauna of the Bering Sea has been studied rather well
(Brodsky, 1950) and the discovery of new species of this order in the deep waters
of the seas of the Far East, viz., in the Okhotsk Sea, Bering Sea, and especially
in the Sea of Japan, where the deep water fauna is extremely poor, was quite un-
expected. However, careful examination of plankton samples from the Bering Sea
resulted in the discovery of a large specimen of Cornucalanus, which is described
here as a new species. The calanoid fauna of the North Pacific and of the seas
of the Far East (North Temperate Pacific) is known to be characterized by a high
degree of species endemism (Brodsky, 1957), and the discovery of a new species
here confirms the specificity of the calanoid fauna of the biogeographic area
mentioned.

The synonymy of the species belonging to Cornucalanus is very complicated. It
has been discussed in several papers, Vervoort's (1957) giving the most complete
discussion. That author divided the known species of Cornucalanus into two groups
by the character of the spinules on the large distal setae of the maxilliped. The
first group includes species with these spinules of two types: coarse spinules on
the proximal part and fine, hairlike spinules on the terminal part of these massive,
distal setae, while in the second group of species these spinules are of the same
type, viz., fine and hairlike along the length of the setae.

The first species described here has the spinules of a particular structure: they
are of one type only, but are not shaped as setae but rather as blunt teeth. The
spinules on the setae of the second species are of two distinct types.
Cornucalanus notabilis sp. nov.

Material. — One female from the Bering Sea, in the vicinity of the Aleutian Islands, August, 1950. Collected by K. A. Brodsky.

Types. — Holotype (ZIN ANSSSR N59127) deposited in the Copepoda collection of the Zoological Institute of the USSR Academy of Sciences.

Description. — Body length 6.7 mm. The general shape of the cephalothorax is a regular ellipsoid (figs. 1, 2). The frontal end of the body is smoothly rounded and has neither spine nor ridge. In lateral view a small crest is visible on the apex of the head section (fig. 1), not noticeable when the female is viewed dorsally. The abdomen is 3.5 times as short as the cephalothorax, the abdomen’s surface is smooth, without small setae. The genital segment is symmetrical, 1.5 times as long as the following one. The fifth thoracic segment is separated from the fourth. Its posterior angles have a small prominence at the apex (fig. 1). The

Figs. 1-2. Cornucalanus notabilis sp. nov., female. 1, lateral view; 2, dorsal view.