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Annual distribution of the brown shrimp *Crangon crangon* and the Baltic shrimp *Palaemon adspersus* in a shallow bay at the Baltic sea

Introduction

The brown shrimp *Crangon crangon* (L.) and the Baltic shrimp *Palaemon adspersus* (Rtk.) occur in the Western Baltic and are also present in the Wismar-Bight. They play a vital role in the complex ecological system of the Baltic sea. Numerous reports are available, especially for the brown shrimp, but mainly only for the North Sea. Data from the Baltic Sea are largely missing. Despite this, a commercial-fishery on the Baltic shrimp does exist, which takes place in the Western Baltic as a regional speciality in the months of June and July. A scientific study to support this seasonal fishery in the region was therefore needed. The occurrence, size, abundance, separation of sexes, reproduction and catch of *Crangon* and *Palaemon* in the Western Baltic was thus investigated within a project of the Institute of Fishery, Federal State of Mecklenburg-Vorpommern, Germany during the course of a year.

Material and methods

The shrimps were collected with a push-net from the beach up to a depth of 0.7 m, by prawn-pot / trap and with dredge (small beam trawl) from a boat in depths between 3 - 4 m over a period of 14 months. The material used for the study is based on 9,129 specimens (7,655 brown shrimps, 1,474 Baltic shrimps). After the catch, shrimps were fixated in 70 percent ethanol for further investigations (measurement, sex separation and egg count).



Fig. 1 ↑
Baltic shrimp in phytal
Fig. 2 →
Brown shrimp on sandy bed

Results and conclusions

The length distribution of all shrimps caught is listed in the following 2 figures, determined by length groups (5 mm).

Fig.3: Length distribution of Baltic shrimp Palaemon

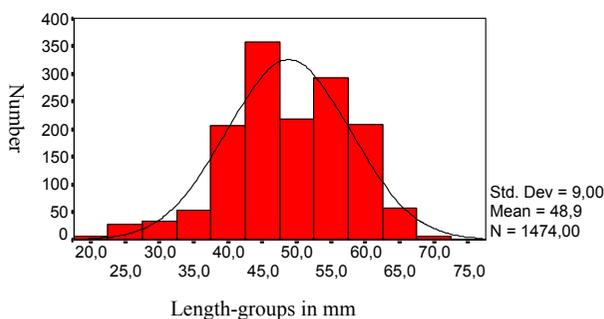
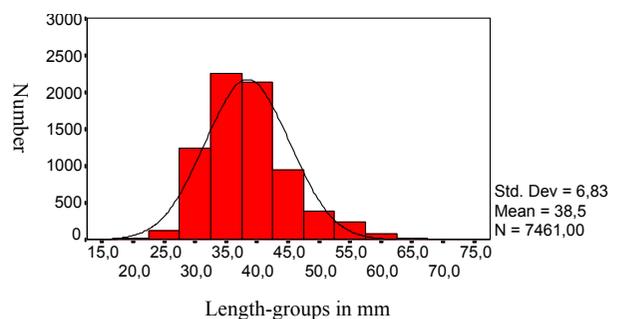


Fig.4: Length distribution of brown shrimp Crangon



Crangon may be caught close to the shore from April to December in greater numbers with the push-net. Only unique specimens of *Crangon* are present between January and March, while *Palaemon* may be caught from April to November in greater depths (3 – 4 m) with a trawl and from June to October near the beach.

The whole study is available as full text-pdf (in German, with English summary) at www.wfish.de