DESCRIPTION OF A NEW CAPRELLA-SPECIES FROM THE NETHERLANDS:
CAPRELLA MACHO NOV. SPEC.
(CRUSTACEA, AMPHIPODA, CAPRELLIDEA)

D. PLATVOET, R.H. DE BRUYNE & A.W. GMELIG MEYLING

ABSTRACT
A description is given of a new Caprella-species, Caprella macho nov. spec., found in the summer of 1995 on two localities in the southern part of the Netherlands. Differences with the closely related Asian species Caprella acanthogaster Mayer, 1890 are discussed.

INTRODUCTION
In august 1995, during inventarisations within the framework of the 'Stichting ANEMOON' monitoring program, a great number of specimens of a rather large Caprella-species were found on two localities in the southern part of the Netherlands. Further research and comparison with other species showed the species not only to be unknown from Dutch coastal waters, but also undescribed. The species is hereby described as Caprella macho nov. spec.

CAPRELLA MACHO NOV. SPEC.

Material


LOCALITY
1. The Netherlands; province of Zeeland. West-side of storm surge barrier; former work-island 'Neeltje Jans'; pontons and scaffolding about 100 m SW of 'Roompotsluis' (type locality).
Caprella macho (nov. spec). 1A) female allotype (11m); 1B) male holotype (24 mm); 1C) maxillipeds (scale III); 1D) right mandible (III); 1E) left mandible (III); 1F) second maxilla (III); 1G) first maxilla (III); 1H) second pereiopod (II); 1I) fifth pereiopod (II); 1J) sixth pereiopod (I); 1K) seventh pereiopod (I); 1L) first pereiopod (II); 1M) pleo- and uroscope (III).
2. The Netherlands; province of Zeeland. East-side of storm surge barrier: former work-island ‘Neeltje Jans’; pontons and scaffolding about 100 m SE of ‘Roompotsluis’.

3. The Netherlands; Eastern Scheldt; Burghsluis; pontons and scaffolding of harbour.

DESCRIPTION
Dimensions: largest male specimen examined 24 mm, largest female 11 mm (both locality 1). In Table I dimensions are given of all specimens. The specimens of locality 1 and 2 are on average longer than those of locality 3. Holotype (male specimen): 24 mm, figs 1B-M). Allotype (female): 11 mm, fig. 1A.

Male: First and second pereiopodes densely covered with setae, third to seventh segment with spines only. Head without dorsal spine. Antennule long, about 3/4 of body length, peduncle 3 times as long as 22-segmented flagellum. Peduncle covered with short setules only. Antenna less than half the length of antennule, ventrally with two rows of setae. Mandibles (fig. 1D and E) with molar, without palp. Left and right lacinia with equal dentation. Maxillule (fig. 1G) with 2-segmented palp. Fourth segment of maxillipedal palp (fig. 1C) covered with rows of very fine setules. First pereiopod (fig. 1L) short, with setation on posterior margin only. Second pereiopod (fig. 1H) long, densely covered with setae. Pereiopod 5 < 6 < 7 (figs. 1I, 1J, 1K).

Female: no setation on the first and second pereionite, dorsal and lateral spines on pereionites 3 to 7.

Appearance in live: live specimens of both male and female Caprella macho are brightly orange to red in colour, the brood pouch of the female (fig. 1A) being pale white with dark red dots. The living animals observed were very active, both free-swimming as hiding between the accompanying flora and fauna.

In the localities examined, this consisted -among others- of molluscs (Crassostrea gigas; Mytilus edulis); tunicates (Styela clava; Molgula manhattensis, Ascidia aspersa, Botryllus schlosseri; Ciona intestinalis); sponges (Scypha ciliata; Haliclona oculata); anthozoans (Metridium senile); bryozoans (Bugula avicularia & Bugula sp.); hydrozoans (Obelia geniculata, Electra pilosa); crustaceans (among which Jaspa marmorata; Pthisica marina; Palaemon elegans, P. adspersus, Balanus crenatus & Elminius modestus and algae, among which Ulva spec., Antithamnion spec, Ceramium rubrum, Callithamnion spec., Bryopsis hypnoides, Bryopsis plumosa & Cladophora spec.

RELATED SPECIES
In the Atlantic there are no Caprellid species comparable with C. macho (Sars, 1995; Chevreux & Fage, 1925; Schellenberg, 1942; McCain, 1968; Cattjriesse, Mees & Hamerlynck, 1993). The only closely related

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Table I: Average size in mm (av.), standard deviation (st. dev.), maximum (max.) and minimum (min.) length of three samples. Loc. = locality, N = number of specimens.

<table>
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<th>Loc. 1:</th>
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species seems to be Caprella acanthogaster Mayer, 1890, from east Asia and South America. However, the characteristic spine on the head of C. acanthogaster is missing in C. macho, and the structure of the palm in gnathopod 2 is different: the two teeth on the palmar margin are subequal in C. macho and unequal in C. acanthogaster (fig. 2A). Also the distal notch is less deep in C. macho.

DISCUSSION
It is not clear why the species escaped attention until now, since the animals are clearly different from the other autochthonous species. Although described from the Netherlands, it is not likely that the species is endemic. Most probably it was somehow imported from elsewhere, as did so many other species in the last decennia. Whether the relatively high water-temperature in the summer of 1995 had any influence on the settlement and/or increase of the species is not clear.

ETYMOLOGY
The name macho is proposed because of the ‘hairy’ appearance of the male, the first and second peraeonites being densely covered with setae.

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REFERENCES

D. Platvoet,
R.H. de Bruyne,
A.W. Gmelig Meyling,
I.S.P.,
P.O. Box 94766,
1090 GT Amsterdam,
The Netherlands.

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