

LETTER TO THE EDITOR

Ecology of *Metridia gerlachei* Giesbrecht in the western Bransfield Strait, Antarctica—Comment

IN a recent article about the ecology of *Metridia gerlachei*, HUNTLEY and ESCRITOR (1992; pp. 1028–1029) state “As in all species of *Metridia*, early stage (CI–CIII) and male and female CVI copepodites are easily identified on the basis of gross morphology (i.e. the numbers of pleopods and urosomal segments), but CIV and CV copepodites are indistinguishable in this regard (OTTESTAD, 1936)”. This statement is incorrect because all copepodid stages of metridinid copepods can be separated by counting the number of somites (body segments) and the number of ramal segments of thoracopods 2–5 (swimming legs 1–4).

PIÑERO DI VERDINELLI (1981) described CIV, CV and CVI of *M. bjornbergae*, a species that she found similar to the co-occurring *M. gerlachei* in the Weddell Sea. Among differences between CIV and CV that she illustrates (in figures on pages 49–62) are the number of somites of the urosome (three for CIV and four for CV), the number of exopodal segments on swimming legs 1–4 (two on CIV and three on CV), and the number of exopodal segments on leg 5 of females and males (one on CIV and two on CV). These differences in numbers of somites and segments are identical for copepodids of *Gaussia principis* and *Pleuromamma xiphias*, representatives of the other two metridinid genera (SEWELL, 1932; FERRARI, 1985), as well as for copepodids of related calanoid families (FERRARI, 1988, provides literature sources for many of these studies of developmental morphology).

Ottestad wrote only two papers on copepods, both about Southern Ocean specimens. In the first he made no attempt to separate copepodids of *Metridia gerlachei* using morphology (OTTESTAD, 1932; p. 53). Later he presented a formula for identifying copepodids but gave no morphological descriptions or illustrations of the different stages (OTTESTAD, 1936). His stages I–III are CII–CIV, stages V–VI are correct, his stage IV is an incorrect morphological formula. He was missing CI, which in his formula would be “3 pairs of legs and 2 abdominal somites”.

It also should be noted that copepods have no pleopods, which are swimming legs on abdominal somites. They have up to five cephalic appendages and up to seven thoracic appendages but no abdominal appendages. HUYS and BOXSHALL (1991) provide an introduction useful for marine biologists about the identity and morphology of copepod somites and appendage segments.

HUNTLEY and ESCRITOR (1992) use a statistical analysis of the length of the cephalothorax (correctly, the prosome) to separate copepodids IV and V. Without more information about the relationship between prosome length and morphology of the copepodids they examined, it is impossible to determine the degree to which their conclusions are in error.

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