

ON SOME ANOMALIES IN THE ABDOMINAL REGION OF *NICHOLLSIA*
MENONI TIWARI 1955 (ISOPODA : PHREATOICOIDEA)

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ABSTRACT

Some morphological anomalies of *Nichollisia menoni* Tiwari, in five specimens have been dealt with.

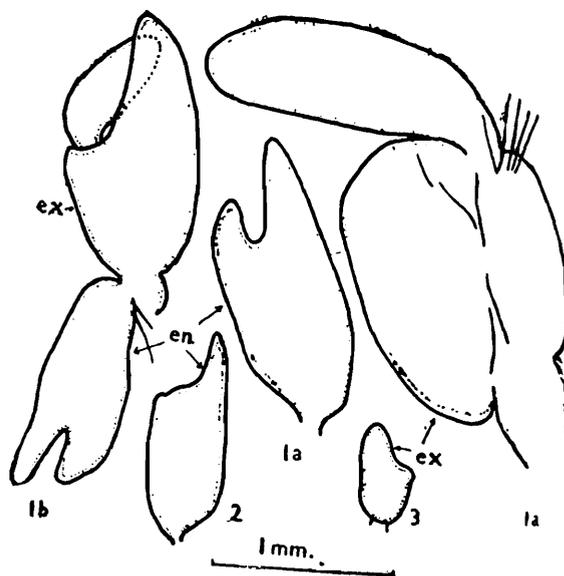
References to morphological anomalies in Crustacea are abundantly available in literature. Ram (1972) for the first time reported abnormality in the cephalothoracic appendages of *Nichollisia kashiense* Chopra and Tiwari 1950, belonging to the Suborder Phreatoicoidea. There appears to be no further record of abnormality among the Phreatoicoidea.

During the course of studies on a small collection of *Nichollisia menoni* the author was confronted with a few abnormal abdominal appendages in some specimens. Out of 30 specimens collected from two wells in the same locality, 5 were found to have anomalies and reported below :

Specimen No. 1 : Adult male has both pleopods abnormal in the third abdominal segment. The exopod of right pleopod (fig. 1a) possess normal inner lobe but the outer lobe is underdeveloped. It is reaching a little beyond the origin of inner lobe. Similarly the endopod has slightly underdeveloped outer lobe.

The left pleopod has a normal endopod but the atrophied (fig. 1b) exopod is nearly equal to the endopod in size and shape.

The second abdominal segment on its right side has emarginate lower margin and its posterior corner is rounded.



- 1a. Right pleopod of third segment
- 1b. Left pleopod of third segment
2. Endopod of first right pleopod
3. Right exopod of fourth segment

Abbreviation : en. endopod ; ex. exopod.

Specimen No. 2 : Subadult female has the inner lobe of endopod (2 in fig.) of first right pleopod absent.

Specimen No. 3 : Subadult female :

In the second segment, the right endopod is normal in shape but half in size compared to the normal left one.

Specimen No. 4 : Adult female :

In the first segment the right endopod is atrophied and nearly half the size of normal left endopod. In the second segment the right endopod is devoid of outer lobe.

Specimen No. 5 : Young female (3 in fig.) :

Both the exopod and endopod of right side in the fourth segment are atrophied and are nearly equal. The inner lobe of exopod is absent and endopod is nearly half to that of left side.

From the above descriptions it is evident that anterior abdominal appendages are mostly affected on right side. In the case of *Nichollisia kashiense* additional appendages were reported (Ram 1972) on the left side. In the present case the anomalies do not represent extra growth but atrophied appen-

dages. Thin asymmetry in the micromorphology of appendages in *N. kashiensis* has been found very common (Ram unpublished data).

At this stage it is difficult to state whether these anomalies are of embryonic or of later period in the life of individuals.

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