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MORPHO-ECOLOGICAL ANALYSES
OF NEOTROPICAL *CYTHERIDELLA* (*Ostracoda Crustacea*)

Interrelationships between geographical distribution, environmental conditions, phenotypic variability and reproductive modes are poorly understood for most ostracod species.

Moreover, there is only limited knowledge about intraspecific morphological variability of soft and hard parts.

We have investigated the intraspecific limb and shell variability of the neotropical freshwater ostracod species *Cytheridella ilosvayi* which has been known so far to reproduce only sexually. Limb variability of adult and juvenile individuals (down to A-3) is generally low. Highest variation is shown by podomere proportions of the antennas, while thoracopods and setae provide minor influence on the variability. Based on discriminant analyses, some morphometric parameters of the shell (i.e., shell length, position of the transversal sulcus) have proved to be more significant than limb ratios for the differentiation of the *C. ilosvayi* morphotypes. Adult females exhibit a large size range in which two clearly separated morphotypes exist. According to the correspondences in limb ratios between smaller females and males they are interpreted as being sexual. Consequently, the large females are assumed to be parthenogenetic.

Based on these results, we will analyse *Cytheridella* spp. populations through their whole geographical range, focussing on the intraspecific morphological variability in relation to ecological parameters (e.g., habitat type, solute composition, and temperature) in order to identify possible biogeo-

graphical patterns of morphological disparity and the link with ecological conditions and the reproductive mode.

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