

## **Karyotypical characteristics of two allopatric African populations of anhydrobiotic *Polypedilum* Kieffer, 1912 (Diptera, Chironomidae) originating from Nigeria and Malawi**

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### **Abstract**

© Ninel A. Petrova et al. The African chironomid *Polypedilum vanderplanki* Hinton, 1951 is the only chironomid able to withstand almost complete desiccation in an ametabolic state known as anhydrobiosis. The karyotypes of two allopatric populations of this anhydrobiotic chironomid, one from Nigeria and another from Malawi, were described according to the polytene giant chromosomes. The karyotype from the Nigerian population was presented as the reference chromosome map for *P. vanderplanki*. Both populations, Nigerian and Malawian, showed the same number of chromosomes ( $2n=8$ ), but important differences were found in the band sequences of polytene chromosomes, and in the number and the arrangement of active regions between the two populations. Such important differences raise the possibility that the Malawian population could constitute a distinct new species of anhydrobiotic chironomid.

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### **Keywords**

Allopatric populations, Anhydrobiosis, Chironomidae, Malawi, Nigeria, *Polypedilum vanderplanki*, Polytene chromosomes