

SEXUAL DIMORPHISM IN SMALL RODENTS: MEASURING PLATO'S IDEAS?

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The question is how to measure SD in small rodents in which postnatal growth continues throughout their life span, and may be considerably influenced by temporary conditions and consequent life-history decisions. We analysed SSD in the genera *Apodemus* and *Mus* on the basis of extensive original data supplemented by published sources. The results suggest that in many species adult males are on average somewhat larger than conspecific females. Interspecific pattern of SSD follow the Rensch's rule. Nevertheless, we demonstrated that mouse body is a mosaic of monomorphic and dimorphic traits. Thus we raised questions about the nature of SD. What we want to do really? To measure and compare the actual mean sizes of adult males and females (for this we suggest the term realised SD) or rather estimate potential size of males and females and further compare male and female ideas? We are sure that the latter is more appropriate decision. Specimen reaching their asymptotic size are rare both in nature and museum collections. However, there is another possible solution. There are morphological traits reaching adult size much earlier. Such traits are subjected to natural selection also in adult animals, but their size is adjusted according to general expectation of needs, without any possibility to change it in an adaptive manner during adulthood. We focused on two simple traits growing in such a manner: the hind foot length and molar size. While the former trait appeared highly dimorphic and useful for between species comparisons, the latter is strictly monomorphic.