Fluctuating asymmetry of millipedes

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Fluctuating asymmetry (random, between-sides differences of bilateral traits at population level) has not been investigated on millipedes yet. It is an alluring tool for conservation biology and it would be very useful to know how to involve millipedes into such investigations.

Four from eight traits of two julid species (Diplopoda, Julida) proved to be useful for measuring fluctuating asymmetry. These are: the right minus left values of ocelli, two seatea groups (lingual and basal) on the gnathochilarium, and setae on the modified first male legpair (useful only for males). With the asymmetry of these traits sexual dimorphism of fluctuating asymmetry is present, females showing bigger fluctuating asymmetry on average. Differences between two differently stressed habitats are also found, specimens from the more stressed habitat proved to have bigger fluctuating asymmetry on population scale.