

## Meiosis and Chromosome Complement of *Atractomorpha lata* (= *A. bedeli*) (Mochulsky, 1866) (Orthoptera: Pyrgomorphidae) Collected in Cameroon

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**ABSTRACT:**

This article presents detailed information on the meiotic process and karyotype of *Atractomorpha lata* (= *A. bedeli*), a Pyrgomorphidae grasshopper endemic to the West and North-West Regions of Cameroon. It includes chromosome number, morphology and chromosome lengths. The meiotic process in the species was normal and chiasmata with a mean chiasma frequency of  $12.874 \pm 0.29$ . The percent rod shaped bivalents present was significantly higher ( $P < 0.05$ ) than percent ring shaped bivalents. Percent bivalents with 1, 2 and 3 chiasmata were in the series: 1 chiasmata > 2 chiasmata > 3 chiasmata. The X chromosome revealed the reversal type of heteropycnosis. The detailed karyotype of *A. lata* from Cameroon (Africa) is here described for the first time. The species has a diploid karyotype of 23 and the sex mechanism is XX –XO. Short chromosome arms were visible in mitotic Metaphase chromosomes hence the chromosomes in the species were acrocentric. The karyotype revealed three large, five medium and one small chromosomes (3LL – 5MM – 1SS). Chromosome lengths varied from 8.40 to 2.10  $\mu\text{m}$  and the haploid set was 56.39  $\mu\text{m}$  long. The X chromosome was 5.6  $\mu\text{m}$  and medium in size.

**Keywords:**

*Atractomorpha lata*, Pyrgomorphidae, Karyotype, Meiosis.