



Karyotypic Analysis of Freshwater Crab, *Maydelliathelphusa masoniana* (Henderson, 1893) from Jammu Region of J&K

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Abstract: Present communication is the first report on the cytological and karyotypic analysis of an ecologically and economically important species of freshwater crab, *Maydelliathelphusa masoniana* (Decapoda: Brachyura) from India. Such aspects of freshwater crabs, in particular, have been least investigated probably because of the comparatively small size of their chromosomes which pose a significant problem in handling the material. Colchicine treatment of 48 hrs gave efficient results in respect of the degree of condensation of chromosomes. The cytogenetic study revealed the diploid number of 96 chromosomes and sex chromosomes were indistinguishable. The karyotype indicated the presence of 8 metacentric, 1 sub-metacentric, and 39 telocentric chromosome pairs. The haploid karyotypic formula for *Maydelliathelphusa masoniana* could be inferred as $n = 8m + 1sm + 39t$. The length of the chromosome varied from 0.35 μ m to 1.15 μ m. The present study will help in planning intra and interspecific hybridization/breeding programmes besides solving various taxonomic ambiguities.

Keywords: Cytogenetics, *Maydelliathelphusa masoniana*, Freshwater crab, Karyotype, Idiogram
