

DIVERSITY AND DISTRIBUTION OF FRESHWATER CRABS IN THE KNUCKLES MOUNTAINS AND CENTRAL HIGHLANDS OF SRI LANKA

M.M.S.I. KARUNARATHNA AND P.K. DE SILVA

Department of Zoology, Faculty of Science, University of Peradeniya

Knuckles mountains as well as the highlands of Nuwara Eliya District are situated in the central region of Sri Lanka. Although Knuckles covers a relatively small area (182 km²), the species and the generic diversity of freshwater crabs of the region are higher than those of Nuwara Eliya region. Eleven species of freshwater crab species belonging to four genera are found in the Knuckles mountains. They are *Ceylonthelphusa rugosa*, *C. soror*, *C. sanguinea*, *C. sentosa*, *C. callista*, *C. armata*, *C. scansor*, *C. cavatrix*, *Perbrinckia nana*, *Oziothelphusa stricta* and *Mahata adonis*. From Nuwara Eliya District only four species, namely, *C. rugosa*, *C. soror*, *P. glabra* and *P. punctata* have been identified so far.

In both regions, from 1000 to 1500 m in elevation, the species diversity is relatively higher. *C. rugosa* is the commonest crab found in both regions, where it has a wide range of distribution. It has been observed to coexist with *C. soror* at an altitude of 1000 to 1600 m. The abundance of *C. soror* is very low in Nuwara Eliya in comparison to Knuckles. *C. rugosa* and *C. soror* are the dominant species in lower altitudes in both study areas. *C. sanguinea* and *C. callista* are more abundant in the higher altitudes of Knuckles region, but they are not found in Nuwara Eliya region; instead, *P. glabra* and *P. punctata* are found in this region. *P. glabra* is found in semi terrestrial habitats, whereas *P. punctata* is found in shallow, shaded, streams. *P. glabra* is widely distributed in upper parts of Nuwara Eliya region and it is the only species found above 2000 m elevation, e.g. at the peak of Piduruthalagala.

The low diversity of freshwater crabs in Nuwara Eliya region does not show any significant relationship with the pH of water. However, relatively low temperature throughout the year (8-22°C), differences in edaphic factors such as soil texture and the less diversity of natural forests may have contributed to the relative paucity of freshwater crab species in Nuwara Eliya region.

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