

Distribution and habitats of *Corbicula fluminalis africana* (Mollusca: Bivalvia) in South Africa

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Abstract

An account is given of the geographical distribution and habitats of the South African representative of the genus *Corbicula* Mühlfeld 1811, formerly known as *C. africana* (Krauss, 1848) but currently regarded as conspecific with the Asian clam, *C. fluminalis* (Müller, 1774). Data pertaining to 390 samples of *C. fluminalis africana* (Krauss, 1848) were extracted from the database of the National Freshwater Snail Collection (NFSC) and statistically analysed. Details of each habitat, as well as mean altitude and mean annual temperature and rainfall for each locality, were processed to determine chi-square and effect size values. An integrated decision tree constructed from the data indicated that temperature, altitude, current speed and type of water-body seemed the more important factors that significantly influenced the distribution of this species in South Africa. In spite of the fact that *C. fluminalis africana* is relatively widespread in South Africa and was recovered from a wide range of habitat types and water-bodies, it has, to our knowledge, not yet been reported to cause problems in cooling circuits as experienced elsewhere in the world. It is proposed that the feasibility to exploit this species for monitoring heavy metal pollution in freshwater biotopes should be investigated in view of reports from elsewhere in the world that it has the ability to accumulate metals such as copper, lead, zinc and manganese.

Keywords: *Corbicula fluminalis africana*, *C. fluminea*, geographical distribution, habitat analysis, freshwater Bivalvia, South Africa