

Abstract

We compared 2 methods for sampling the freshwater crab *Potamonautes odhneri* (Colosi) in Kenyan streams: standard Surber sampling, in which a sample is taken over a period of several minutes; and rapid Surber sampling, in which the process is reduced to around 10 seconds. Rapid Surber sampling caught more crabs than standard Surber sampling. This suggests that the crab species investigated is normally able to evade capture if sampling is carried out at an unhurried pace, but that if precision is sacrificed for speed, then capture efficiency increases. The size of crabs caught using the 2 techniques was similar, and use of baited traps set in the same locations showed that Surber sampling methods were not capturing larger individuals. Like all methods available to sample large benthic crustaceans, rapid Surber sampling has its limitations, but this study demonstrates that it can be used as a method for rapid assessment of crab presence and for comparative determination of population density, to significantly greater effect than the standard method of Surber sampling.