(Linnaeus, 1758) from Versova creek, Mumbai

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During monsoon trawl ban period (June-August), due to the non-availability of fish, fishermen at Versova village tend to exploit bivalves from the intertidal area along the creeks for their livelihood. It was observed that fishermen regularly collect the green mussel *Perna viridis* from Versova creek. Though this creek is one of the most polluted creeks in Mumbai, this species was found almost throughout the year.

Monthly samples were collected from the creek during lowtide days by hand-picking from the rock

crevices. The samples were brought to the laboratory for length-weight analysis. The shells had darker shade (Fig. 1). Shell length (L) was measured using a digital caliper and total weight (W) (+ 0.01 g) was determined using an electronic balance after the specimens were dried on blotting paper. A total of 675 specimens ranging in length from 14 to 89 mm with the corresponding weight ranging from 0.495 to 37.612 g were analysed over a period of four years from January 2005 to December 2008.

Fig. 1. Green mussel, *Perna viridis* (Linnaeus, 1758) from Versova creek

Length-weight relationships were obtained with regression analysis by the method of 'least squares' based on individual measurements. The relationship of the length and weight is expressed by Le Cren's (1951) equation and graphically represented (Fig. 2). The length-weight relationship of *P. viridis* from Versova creek is expressed as $W = 0.00035_{*} L^{2.67035}$ ($r^2 = 0.8836$).

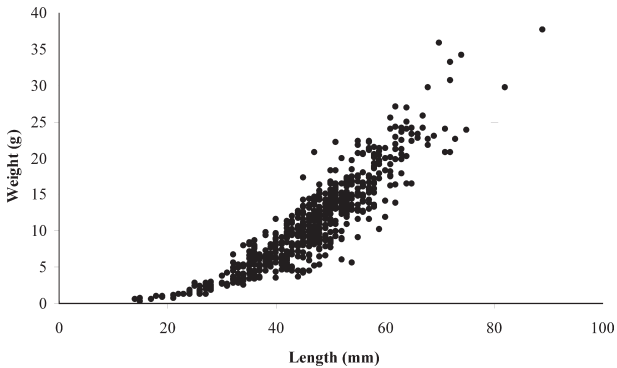

Fig. 2. Scatter plot of length-weight relationship of *Perna viridis* from Versova creek, Mumbai

P. viridis from Versova creek can be used as an indicator organism for pollution assessment and also to assess the stress caused by pollution on the ecosystem.