Population dynamics of *Hyale nigra* associated to *Bryocladia thyrsigera* at Peruibe, Itanhaém beach, southeastern Brazil

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The size-class structure, density trends, sex-ratio, survivorship curve, net reproductive rate, generation time and per capita rate of population growth were established for a population of *Hyale nigra* from the intertidal region at the *Bryocladia thyrsigera* belt. Marine algae often forms habitat patches occupied by an associated fauna composed mainly by crustacean such as amphipods and isopods. Collections were taken once a month from march/1997 to February/1998. A total of 26909 individuals were sampled. There were two reproductive peaks one smaller in May and another one throughout the warmer months from October to March imposing, with the continual reproduction, the overlapping of generations. A sex ratio biased in favor of females was recorded in all sampling dates, a common pattern in epifaunal species. H. nigra appears to be r strategist, with iteroparous females and multivoltine cycle. It has a Type II survivorship curve consistent with parental care. The reproductive rate estimated was $1,36 \pm -0.593$, the generation time $4,303 \pm -0.6$ and the per capita rate of population growth, 0,019. The production of small eggs is related to a decrease in maturation size of females, which allows the production of more than one brood per year. The reproductive strategy is related to the high-risk littoral habitat of the species which are exposed to variations in tide, osmotic pressure and thermal shock. Knowledge of the population dynamics of intertidal species constitutes an important tool to assess ecological damage in the coastal area.