# Population dynamics, feeding ecology, and larval biology of the surf clam, *Donax hanleyanus*

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Introduction
Exposed intertidal sandy beaches are often dominated by bivalves of the family Donacidae, constituted by the genera *Donax*, *Egeria* and *Iphigeni*. The surf clam *Donax hanleyanus*, also known as "berberecho", can be found along the Atlantic coast of South America, from Rio de Janeiro (Brazil) to Punta Mogotes (northern Argentina). It has a maximum adult size of 42 mm and rarely lives for more than 4 yr.
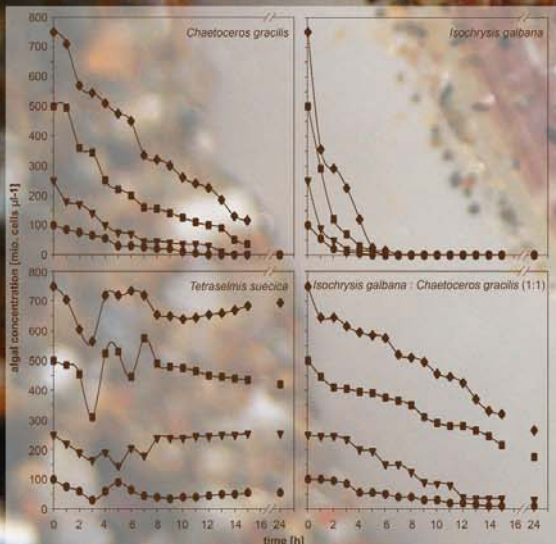

Conclusions
Monthly sampling will be continued to gain more accurate information of the population dynamics. For microgrowth analysis fluorescent stains (Alizarine, Calcein, Strontium chloride) will be used. In order to describe the larval biology, more spawning events have to be studied. First aquaculture experiments displayed that *D. hanleyanus* could be commercially cultivated and serve as a food resource in the future.
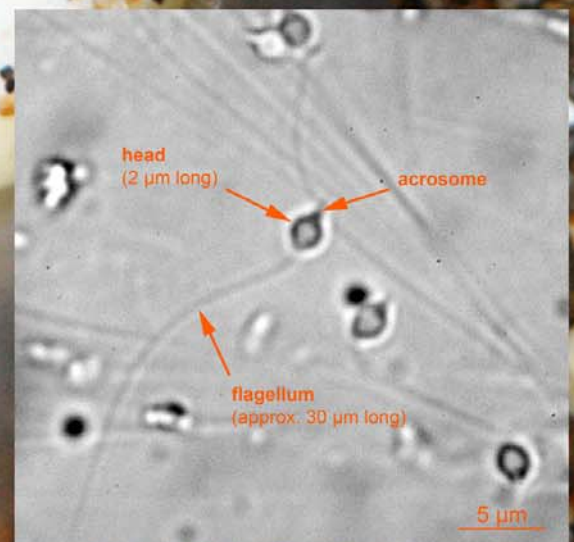
Data collection
In order to study the gametogenic cycle, recruitment patterns, growth, production, and mortality, monthly sampling has been carried out along the Argentine coast, in Santa Teresita (56°40'W, 36°32'S), Villa Gesell (56°58'W, 37°16'S) and Faro Querandi (57°07'W, 37°29'S). For experiments in aquaculture systems, *D. hanleyanus* has been collected from beaches south of Faro Querandi.
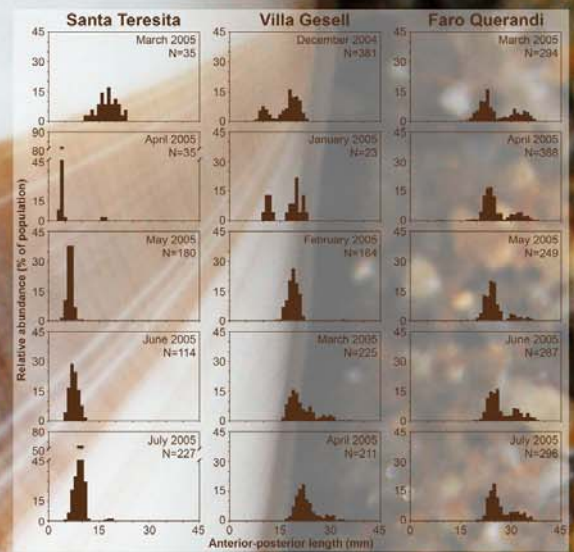
First results
Monthly length-frequency distributions of *D. hanleyanus* show clearly differences in the cohort maximum as well as growth in the populations in Santa Teresita and Villa Gesell. Nutrition experiments in the hatchery showed that *D. hanleyanus* feeds prefer *Isochrysis galbana*. Males of *D. hanleyanus* with 15 mm length spawned 1.47 billion active sperms per individual after stimulations with Serotonin in the hatchery.