

microscopy. The evolution of ingestion and digestion process was observed each hour during 8 hours, and 24 hours after feeding supply. Density was 100 larvae μL^{-1} and temperature was kept at 28°C. All observations were done with alive larvae. To compare feeding behavior between the different algae diets and larval age, two indices were used: absolute ingestion index (A.I.I.) and absolute digestion index (A.D.I.). A qualitative analysis of the stomach filling was done to each larval stage according to the different diets used.

For the three larval ages, ingestibility and digestibility were larger in larvae fed *T. suecica* y *T. tetrahele*. It was not observed both ingestion and digestion on one day-old larvae fed *Chlorella* sp. y *C. cerastoporum*. Ten days-old larvae fed these diets showed an A.I.I. of 25% and A.D.I. of zero. At 18 days-old *C. cerastoporum* was ingested and digested; however the A.I.I. was 65% and the A.D.I. 40%. According to these results, it is confirmed the use of *T. suecica* as a suitable diet to rear *S. gigas* larvae, and it is suggested *T. tetrahele* as a potential feeding. It is not recommended the used of *C. cerastoporum* y *Chlorella* sp. mainly in the first stages of larval development.

KEY WORDS: Mollusk, larvae, *S. gigas*, ingestion-digestion, microalgae

Abundance of *Strombus gigas* Larvae in the North of the Yucatan Peninsula

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ABSTRACT

An abundance study of *Strombus gigas* larvae was realized at north of Yucatan Peninsula, between Caribe Sea and the Alacranes reef, into isobaths of 5 m and 50 m. This study was at July and October of 2001 and March of 2002 in 27 sites. Plankton tows were made for 15 minutes at 1 m/s with a bongo net that had a 0.5 m diameter opening and 202 μm mesh size. Plankton samples were preserved in a 10% neutral formaldehyde-seawater mixture. In the laboratory, the entire volume of each plankton sample was sorted for *Strombus* veligers following the descriptions of Davis et al. (1993). The *Strombus* populations at north of Yucatan Peninsula are

included *Strombus gigas* (Arrecife Alacranes) and *Strombus costatus* (all north coast of Peninsula de Yucatan). The high abundance of *Strombus* larvae (600 larvae/tows) were collected for July, at NW study area into Alacranes reef. At NE of Yucatan Peninsula we found a density of 4 larvae/tows. At N of study area we do not found *Strombus* larvae. With the results we concluded that Alacranes reef is an important area for larval supply to *Strombus gigas* nurseries in the north of Yucatan Peninsula.

KEY WORDS: *Strombus gigas*, abundance, larvae, Alacranes reef

Abundancia de Larvas del Género *Strombus* en la Costa Norte de la Península de Yucatán

Se realizó un estudio de abundancia larvaria del género *Strombus* en el Norte de la Península de Yucatán, entre el Mar Caribe y el Arrecife Alacranes, dentro de las isóbatas de los 5 m y los 50 m. El trabajo se efectuó durante los meses de julio y octubre del 2001 y en marzo del 2002, en 27 sitios de muestreo. Los arrastres se realizaron de forma superficial con una red tipo Bongo, durante 15 minutos a una velocidad de 1 metro por segundo. Las muestras obtenidas fueron fijadas en formaldehído en agua de mar al 10% y neutralizadas con Borato de Sodio. Las larvas de *Strombus* fueron separadas del resto de los gasterópodos tomando como referencia la guía de Davis *et al.* (1993). Las poblaciones de adultos de *Strombus* en el Norte de Yucatán incluyen las especies de *Strombus gigas* (Arrecife Alacranes) y *Strombus costatus* (Total de la costa Norte de Yucatán). La mayor abundancia de larvas de *Strombus* (600 larvas por arrastre) fue encontrada en el mes de julio, al NW del área de estudio dentro de la laguna del Arrecife Alacranes. Al NE de la Península de Yucatán, se encontró una densidad de 4 larvas por arrastre. Al Norte del área de trabajo, no se observaron larvas de *Strombus*. Los resultados indican que el Arrecife Alacranes es un sitio fundamental de existencia de larvas de *Strombus* lo cual lo ubica como sitio CLAVES para el mantenimiento de las poblaciones de *Strombus* en el Norte de la Península de Yucatán.

PALABRAS CLAVES: *Strombus gigas*, abundance, larvae, Alacranes reef