

## SECTION D: LIFE AND EARTH SCIENCES

### FOOD AND FEEDING OF *SIGANUS JAVUS* AND *SIGANUS CANALICULATUS* FROM WATERS AROUND JAFFNA

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*Siganus javus* and *Siganus canaliculatus* reported to inhabit the tropical parts of Indian and Pacific oceans, are found in the coastal areas and brackish water bodies in Sri Lanka.

Stomach contents of *S. javus* ranging in standard length from 2.1 to 30.6 cm, and those of *S. canaliculatus* ranging from 3.3 to 35.1 cm, collected from 12 stations along the Northern coast, Jaffna and Thondaimannar lagoons were examined during the period February 1981 to April 1983.

Analysis of stomach contents of *S. javus* and *S. canaliculatus* indicated that both species are purely herbivorous, feeding on different genera of diatoms, blue-greens, green algae, red algae, brown algae and an angiosperm—*Thalassia*, of which the green algae predominated. In both species the major food components were species of *Cladophora*, *Chaetomorpha*, *Thalassia*, *Licmophora*, *Navicula* and *Oscillatoria*. In *S. javus*, *Cladophora* was the dominant food item contributing to 20.4% in composition by bulk while in *S. canaliculatus*, *Thalassia* predominated with 19.8%.

In both species, when the variations in food habits with size of the fish were analysed by placing fish in 3 cm length classes, no significant variation in food was found.

The analysis of stomach fullness of the specimens collected during day and night indicated an apparent preference of *S. javus* and *S. canaliculatus* for feeding during night.