*Skeletonema Potamos* (Bacillariophyceae) in Patos Lagoon, Southern Brazil: Morphology, Ecology and Distribution. Torgan, L. C. 1; Becker, V. 2; Santos, C. B. 1 Técnico Superior Pesquisador no Museu de Ciências Naturais/FZB; 2 Bióloga SAMAE, Caxias do Sul; Bolsista IC/FAPERGS no MCN/FZB. (torgan@cpovo.net).

The Patos lagoon is a shallow (average depth 6.0 to 8.0 m) polimitic, circumneutral, mesotrophic to eutrophic system, that is located at 30° 23¢ and 32° 07¢ S, 50° 41¢ W and 52° 12¢ W in southern Brazil. The lagoon is connected to the Atlantic ocean by a single narrow canal, there is a long water retention time in the lagoon due to reduced tidal oscillation of the ocean. *Skeletonema potamos* (Weber) Hasle was found in Patos lagoon and the morphological characteristics of this centric diatoms were investigated using optical and scanning electron microscope. Samples were taken monthly along the longitudinal axis of the lagoon distributed over the limnetic, oligo-mesohaline and meso-polihaline zones, from December 1987 to December 1988. The samples were obtained at 20 cm from the water surface, fixed with a neutral lugol solution, and the cells were quantified according to the Utermöhl method. The species was not abundant (2-7 cells/ml) and it was observed at limnetic and oligohaline lagoon zones. *Skeletonema potamos* is considered a pollution-tolerant species of algae that is widely distributed in North America and Europe. The species is here firstly cited for the subtropical region in South America. (Financial support FZB/CNPq/ FAPERGS).