

## THE EXPANTION OF THE INVASIVE DIATOM *DIDYMOSPHENIA GEMINATA* IN PATAGONIA, ARGENTINA.

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*Didymosphenia geminata* was registered in Argentina for the first time in August 2010, a few months after it was reported in Chile. The species was observed forming massive proliferations in Futaleufú River, Chubut Province (43°10'44.9"S/71°39'7.7"W). This river belongs to a patagonian Andean basin the same where the species proliferated in Chile. The presence of the species in pristine patagonic waters generated a great concern at the academic field, at the environmental management agencies and also tourism and fisheries institutions. Among other national and regional institutions, the authority encharged of the management of the watersheds of the rivers Limay, Negro and Neuquen–AIC– proposed and coordinated a monitoring program for the early detection of the species in other areas at risk.

In this framework the sampling and the laboratory procedures protocols were elaborated for the analysis of samples considering international recommendations adapted to local necessities. Besides, a sampling program that covered 48 sites from Neuquén and Río Negro Provinces was held. Each station was visited in fall and spring 2011, plankton and periphyton samples were collected and physical, chemical and hydrological data relevated. Samples were concentrated in the field and laboratory and at least ten slides were analysed. Fall sampling gave negative results in all sites but during the spring the species was registered in plankton and periphyton samples at the rivers Chimehuín (40°4'21.3"S/71°3'8.8"W) and Collón Cura (40°3'37.8"S/70°48'54"W) at the northern sector of the study area, far away from the site where the species is installed since 2010. These results evidence the rapid expansion of the species and the vulnerability of patagonian rivers and allowed to intensify the control in the affected area and to perform the actions to minimize the dispersal of the species by fishermen and tourists. Nevertheless, the absence of the species at the intermediate sampling stations was striking and raised the question about the dispersal agents and mechanisms that will be further analysed.