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QUÉBEC DRIVEN PILOT-SCALE CULTIVATION OF SPOTTED WOLFFISH (ANARHICHAS MINOR)

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ABSTRACT A pilot-scale growth trial featuring the spotted wolffish (*Anarhichas minor*) is currently being run at the facilities of the Maurice Lamontagne Institute (Fisheries and Oceans, Mont-Joli, Qc, Canada) in collaboration with UQAR, SODIM, MAPAQ, MDEIE and the Biodôme de Montréal. Spotted wolffish is a cold-adapted bottom-dwelling marine fish species found in the northern part of the Atlantic ocean (including the Gulf and Estuary of the St-Lawrence). Optimal growth temperatures vary between 6 (broodstock) and 10 °C (early stages). The wolffishes have been identified as group of promising candidates for aquaculture diversification in cold environments (e.g. Quebec, Newfoundland, Norway, Iceland) due to their flesh qualities, robustness, high growth rate at low temperature, density requirement and ‘farming friendly’ life-cycle. Research efforts on these species have been conducted in Québec, Canada since 1999 and focused on reproduction, early-life stages and market outlooks of the spotted wolffish. The next crucial step is to demonstrate that it is an economically interesting species and worthy of further development. This project is aimed at applying “state of the art” rearing practices in order to reach optimal growth of the spotted wolffish until commercial size (1.0-1.5 Kg) is reached, while taking into consideration “fish welfare”. Our large-scale trial will also be examining family effects and the impact of grading fish on growth and hierarchy. Our current estimations indicate that our captive population display similar performance than Icelandic and Norwegian growth data.

Keywords: Spotted wolffish, *Anarhichas minor*, Growth, Density, Commercial, Pilot-scale, Aquaculture, Fish.