

Genetic evidence for kin aggregation in the intertidal acorn barnacle (*Semibalanus balanoides*)

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It is generally assumed that larvae of benthic species are thoroughly mixed in the plankton and distributed randomly at settlement. Yet, it has also been hypothesized that a combination of larval gregarious behaviour coupled with particular oceanographic conditions may prevent larvae from mixing completely, and result in nonrandom spatial distributions following settlement. Using microsatellite markers, the main objective of this study was to investigate the occurrence of statistical connections between relatedness and settlement in the intertidal acorn barnacle from the Gulf of St Lawrence, Canada. A second objective was to test the hypothesis that patches of kin-related individuals came from a common parental site. Our results indicated that a significant number of barnacles within a given sample were more closely related than expected by chance despite the enormous potential for admixture during the planktonic phase. Thus, eight out of 37 samples analysed had relatedness values sign