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ABSTRACT

Genetic parameters and selection responses were estimated for growth and survival of the small abalone *Haliotis diversicolor* using a fully pedigreed synthetic population from two Chinese hatchery stocks and two wild stocks. About 53,300 progeny representing 533 full-sib families from the mating between 308 sires and 533 dams were tested in concrete tanks for five generations. Breeding candidates in the base generation (G_0) and first generation (G_1) were selected based on their estimated breeding values for growth (recorded as shell length at tagging and harvest), while those in later generations (G_2–G_3) were selected according to a selection index including individual breeding values for growth and family breeding values for survival traits. Variance components and genetic parameters were estimated using animal

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