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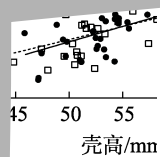
37

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2017

65 70 75 80



壳高/mm

(a)

0.58 0.40~0.46

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0.45~0.66 0.49~

Trait	Heritability (diagonal)	Genetic correlation	Phenotypic correlation
Shell height	0.70	0.45	0.45
Shell length	0.70	0.45	0.45
Shell width	0.70	0.45	0.45
Body weight	0.70	0.45	0.45

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Shell width	0.70	0.45	0.45
Body weight	0.70	0.45	0.45

35% [18] 0.37 0.16~

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(*Fenneropenaeus chinensis*)

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Estimates of genetic parameters of growth-related traits in *Crassostrea gigas* ‘Haida No. 1’

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Abstract: The Pacific oyster *Crassostrea gigas*, naturally distributed in the Pacific Coast of Asia, has become a global aquaculture species owing to its high fecundity and strong environmental adaptability. It is also the most highly produced mollusk species worldwide, and China is the top oyster-producing country. Although China is the highest producer of oysters with a long history of oyster aquaculture, there are no well-documented cases of selective breeding. To genetically improve the productivity traits of *C. gigas*, we initiated a selective breeding program in 2007, concentrating on the establishment of selected strains by mass selection with fast growth rate. After eight generations of selection, significant genetic gains in growth rate were observed in the selected strains. In 2014, the fast-growing strain of *C. gigas* ‘Haida No.1’ was established. However, the genetic parameters of growth-related traits in Haida No.1 are still undetermined. As a result of successive selection in closed population, genetic parameters varied between different generations of selected strains. The estimates of heritability and genetic correla-