

# **PARENTAGE ASSIGNMENT OF STRIPED CATFISH (*Pangasianodon hypophthalmus*) USING MULTIPLEX PCR**

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## **Summary**

Striped catfish (*Pangasianodon hypophthalmus*) is highly commercial indigenous species which has contributed significantly to development of Vietnamese economy. Pedigree information is necessary for the breeding program in striped catfish in order to estimate breeding values accurately and to minimize potential of inbreeding depression. In this study, the multiplex PCR including 3 microsatellites (CB18, CB19, PSP-G579) was developed for parentage assignment in striped catfish samples. The number of alleles and the polymorphism information content of 3 microsatellite ranged 4 – 6 and 0.550 – 0.73, respectively. Parentage analysis of 100 offspring from 5 families demonstrated that 89% of offspring were unambiguously allocated to a pair of parents. The study also discussed the effectiveness of parentage assignment for striped catfish based on microsatellite multiplex PCR.

**Keywords:** *Striped catfish, Pangasianodon hypophthalmus, multiplex PCR, microsatellite, parentage assignment*