

Genetic variation among Dwarf Gourami (*Trichogaster lalia*,
Osphronemidae) populations using Random Amplified Polymorphic DNA (RAPD) markers

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ABSTRACT:

Random amplified polymorphic DNA (RAPD) was applied to generate species-specific diagnostic fragment patterns for the molecular identification of the ornamental aquarium fish species *Trichogaster lalia*, more commonly known as dwarf gourami. The species were collected from various geographically distant locations of Assam. After initial screening, four primers having a length of 10 arbitrary nucleotide sequence were used which generated the RAPD profile for *Trichogaster* species. The primers produced 39 bands in total. In the experiment 22 polymorphic bands and 7 monomorphic bands were produced. The genetic distance of an individual ranged from 0.03 to 0.38. The average genetic distance among the individuals showed that more than 0.03 species are genetically more similar

Keywords:

Genetic diversity, RAPD, Dwarf gourami.