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Remarkable sequence polymorphisms in 18S rDNA of *Pleuronichthys cornutus* (Pleuronectiformes: Pleuronectidae)

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Abstract: Highly conserved 18S rDNA sequences encode ribosomal RNA and evolve in a concerted manner. In this study, 178 sequences of 18S rDNA from the ridge-eyed flounder, *Pleuronichthys cornutus*, were analyzed. The total sequences yielded five distinguishable types of 18S rDNA—A, B, R, S, and L—that were defined based on sequence alignments, clone clustering, and recombination detection. The length of 176 clones ranged from 1838 bp to 1846 bp, with one particularly short clone reaching only 1466 bp and one long clone reaching up to 1869 bp. As per current criteria for pseudogene inference, Type S was inferred to be a pseudogene due to its truncated length (380 bp) and low minimum free energy (-536.9 kcal·mol⁻¹). Type L had a unique 20-bp insertion and was also predicted to be as a pseudogene. Types A and B showed 31 differential sites, which in Type A was consistent with 18S rDNA sequences found in six other flounders, while Type B and recombinant Type R were not. Maximum K2P genetic distances were calculated within Type B (0.0232) and R (0.0313); these were much higher than that of Type A (0.0093) or between the

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