

## Supplementary Material

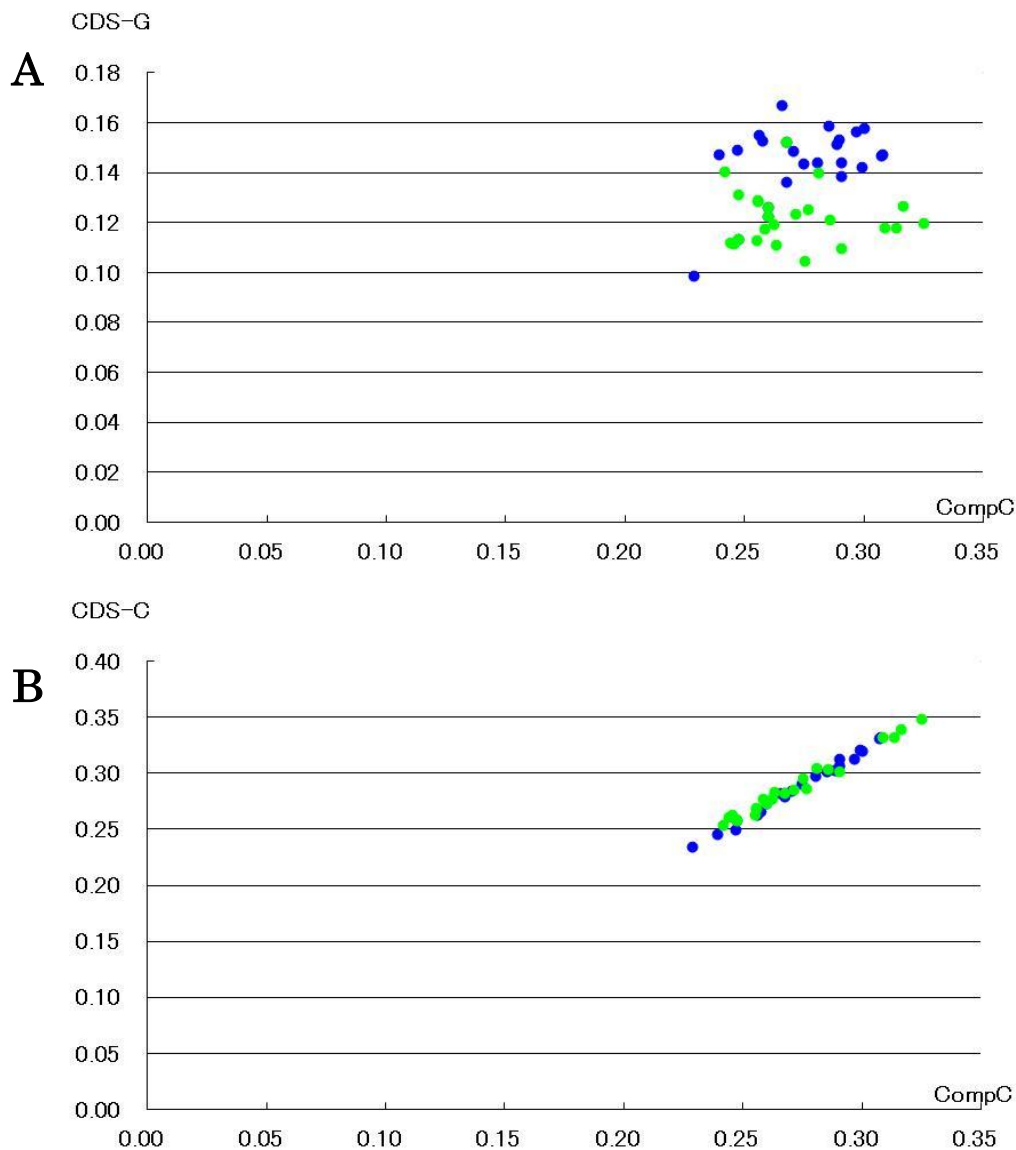
### Evidence for Natural Selection in Nucleotide Content Relationships Based on Complete Mitochondrial Genomes: Strong Effect of Guanine Content on Separation between Terrestrial and Aquatic Vertebrates

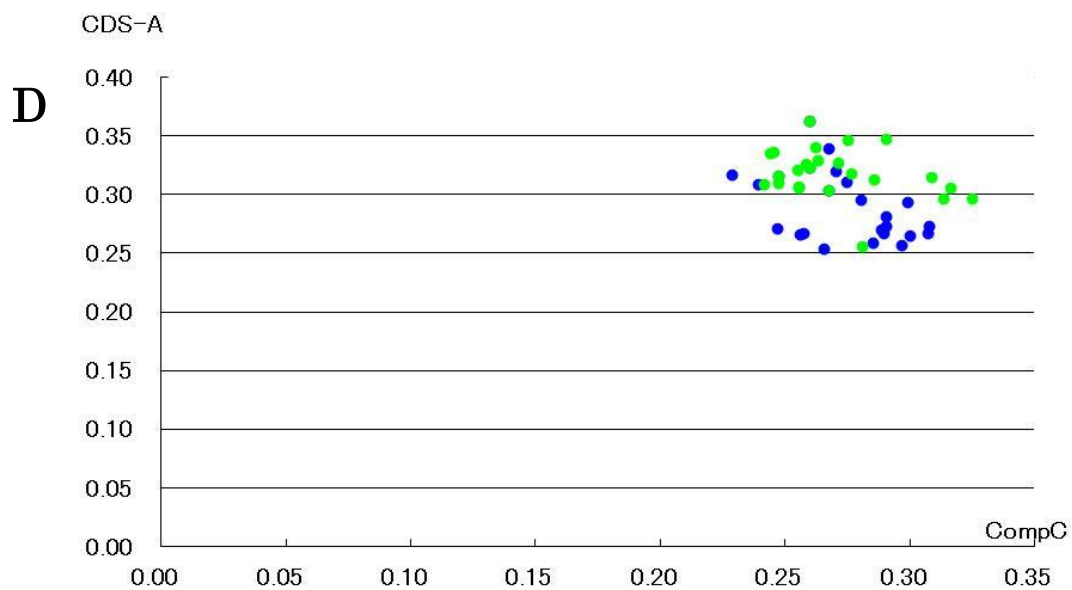
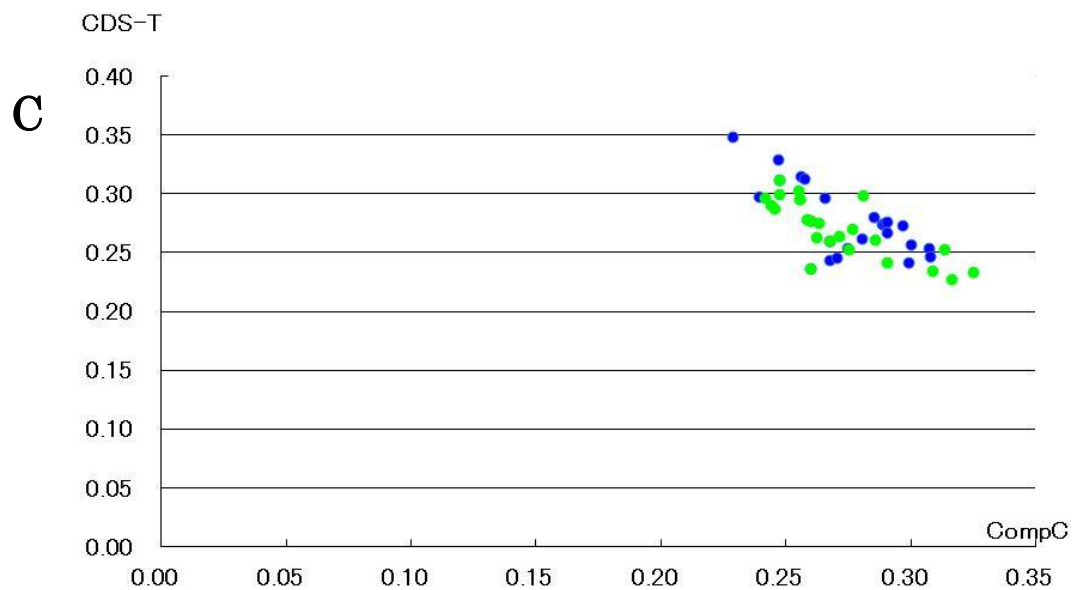
Kenji Sorimachi<sup>1,2,\*</sup> and Teiji Okayasu<sup>3</sup>

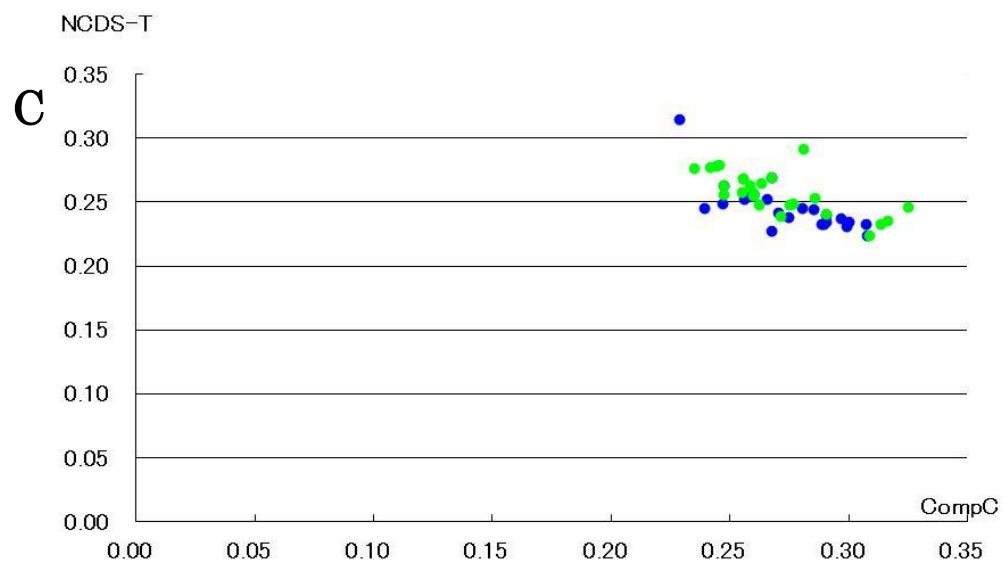
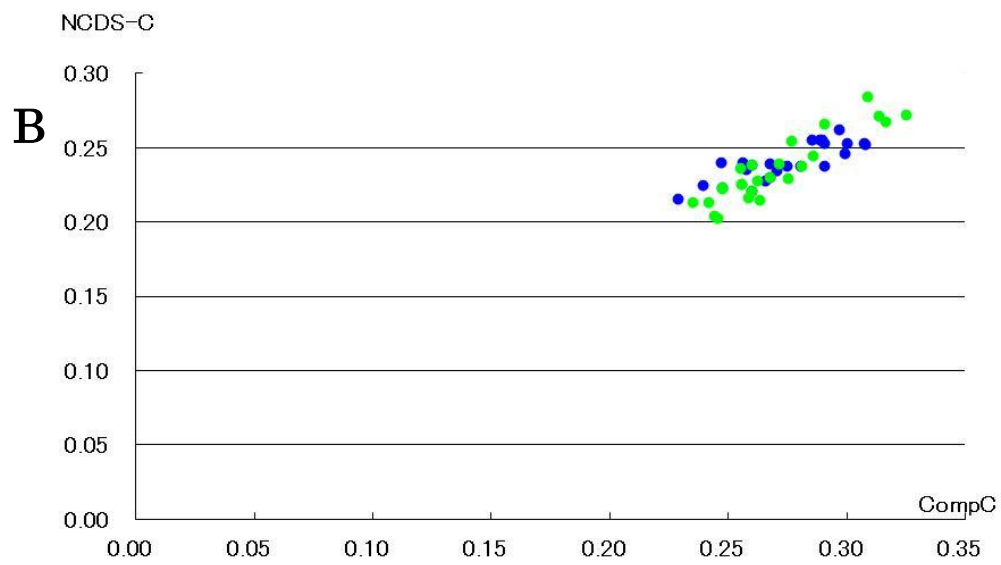
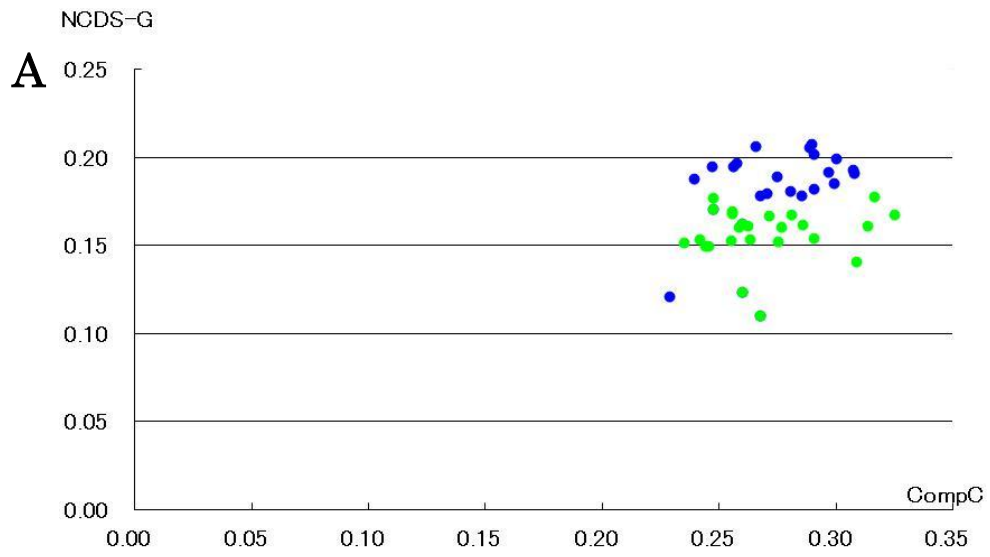
<sup>1</sup>Educational Support Center, Dokkyo Medical University, Mibu, Tochigi 321-0293, Japan

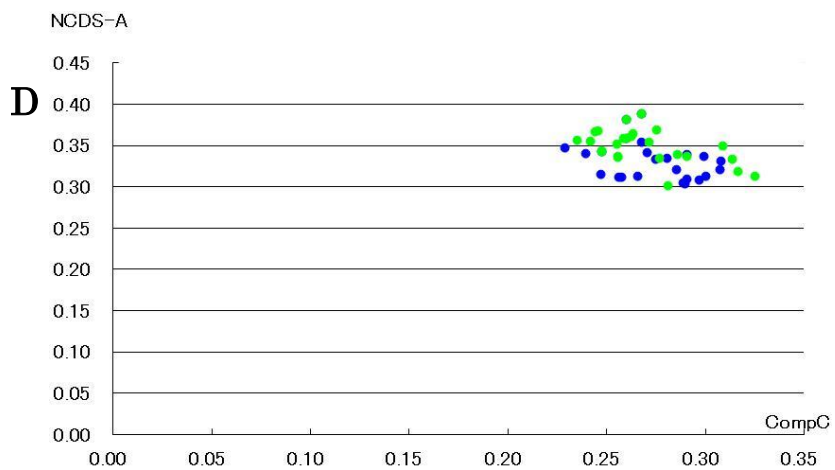
<sup>2</sup>Life Science Research Center, Higashi-Kaizawa, Takasaki, Gunma 370-0041, Japan

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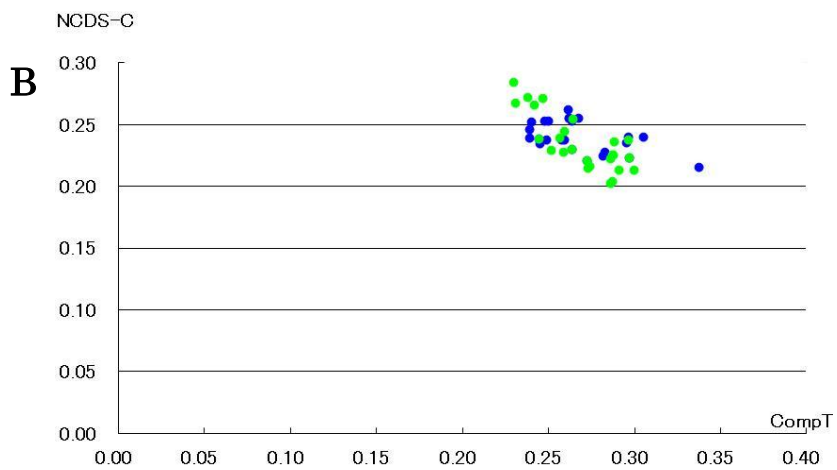
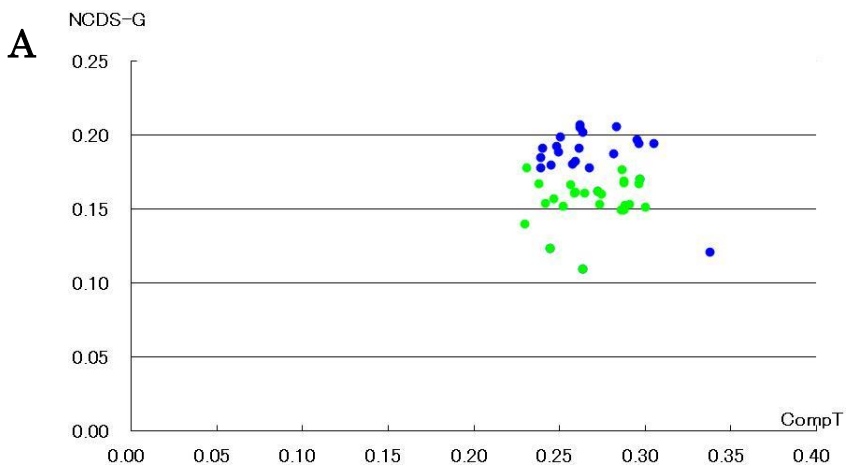


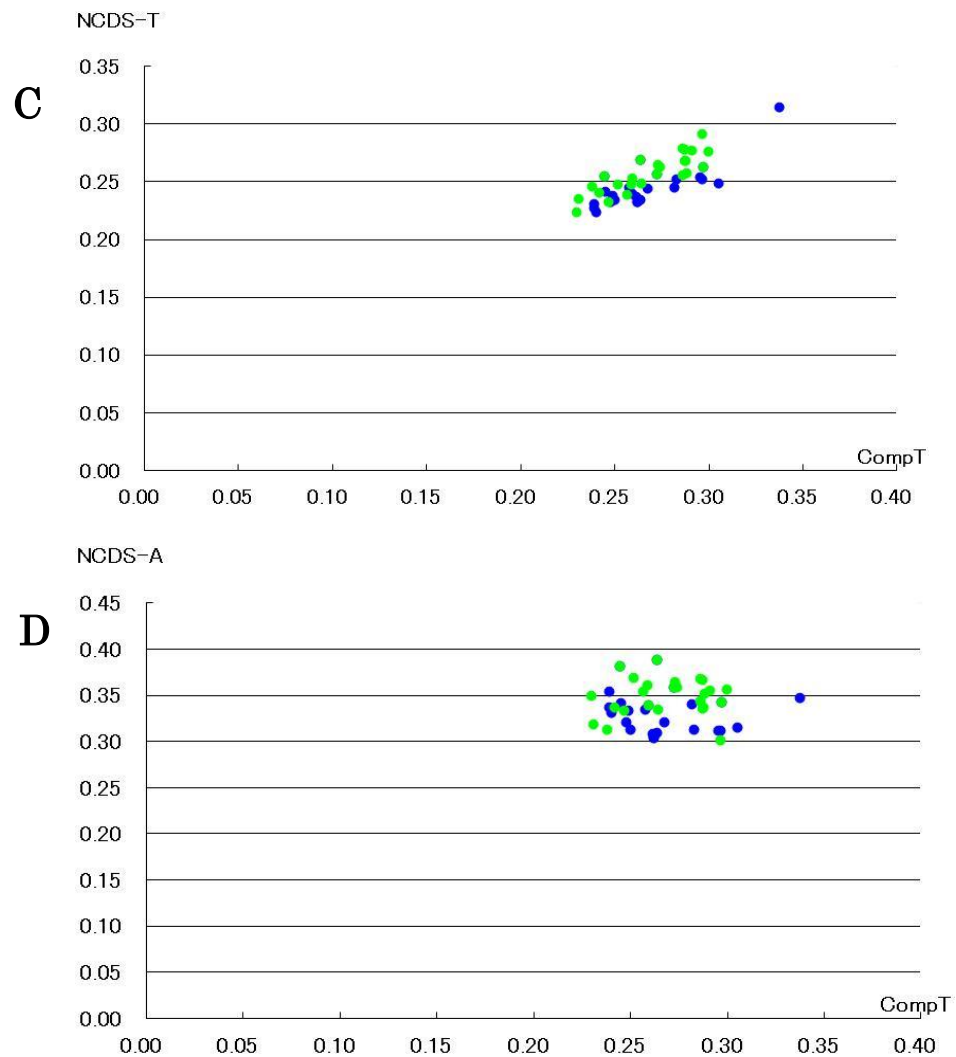






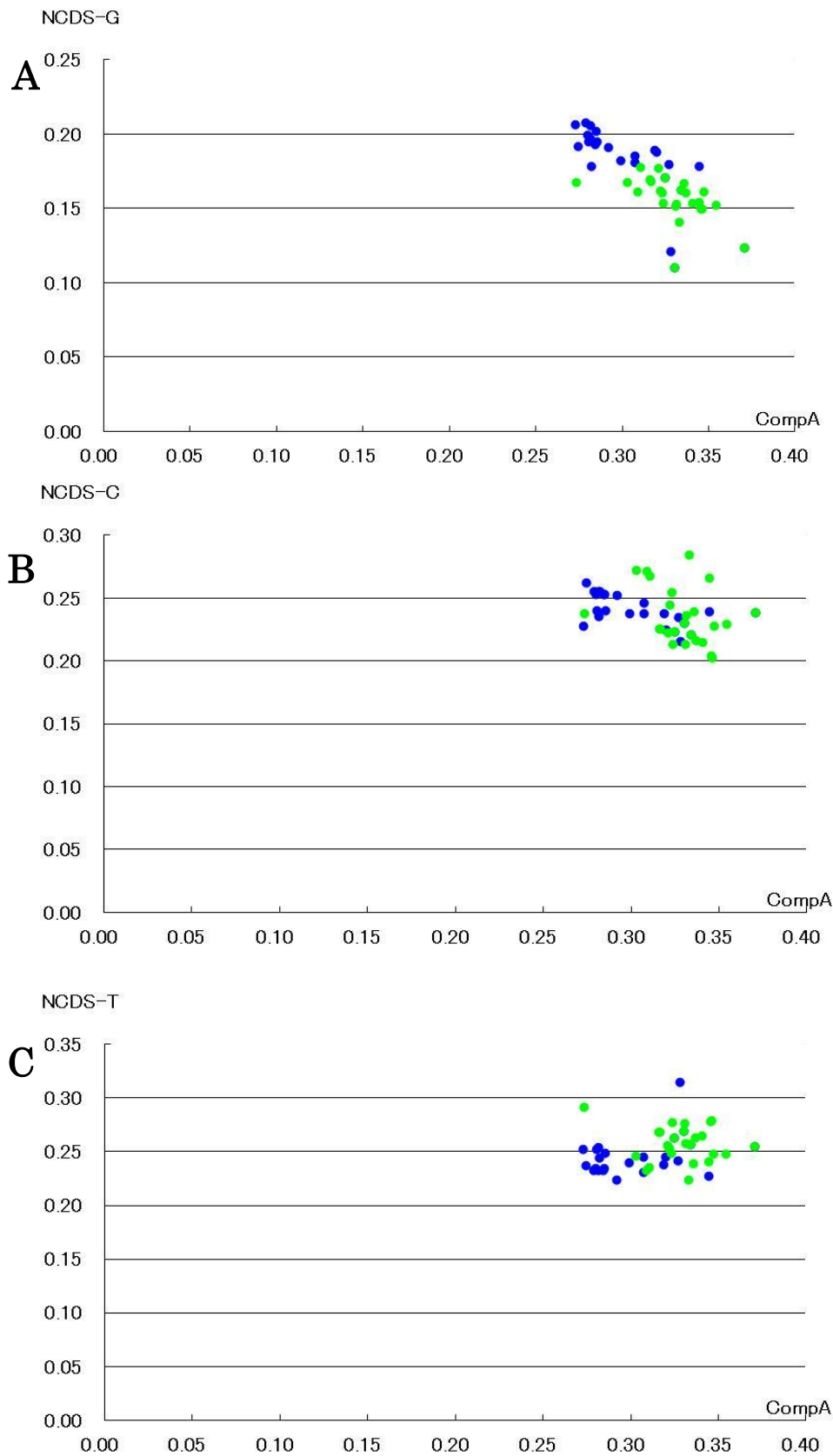
1-2

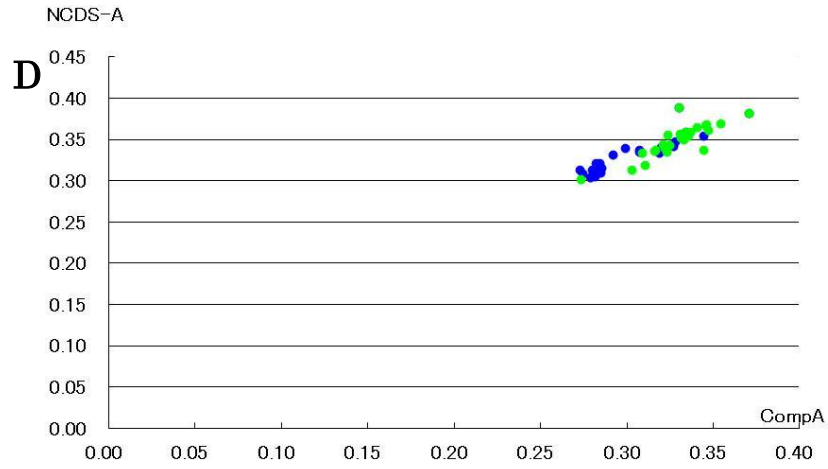




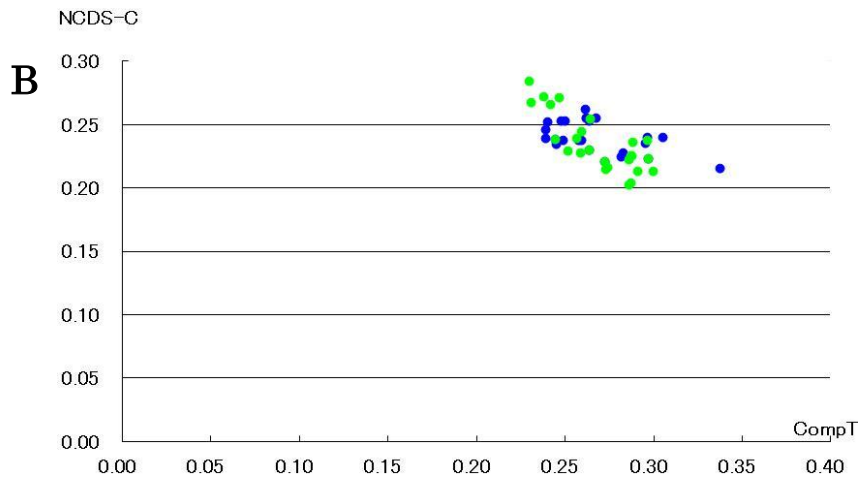
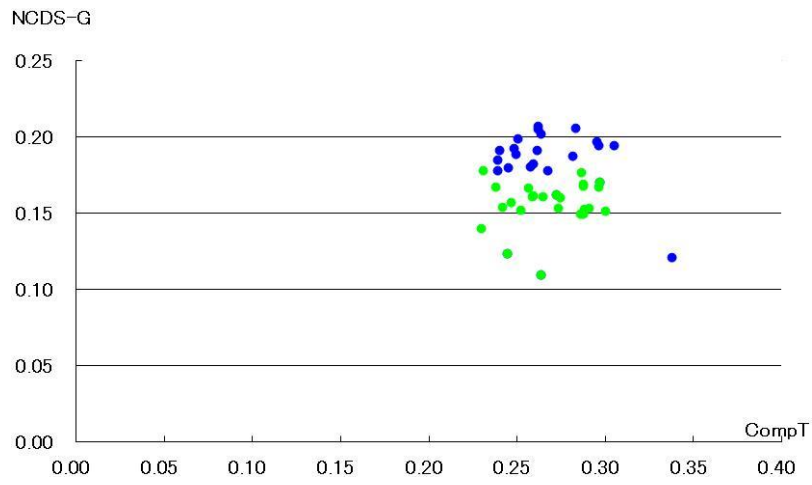
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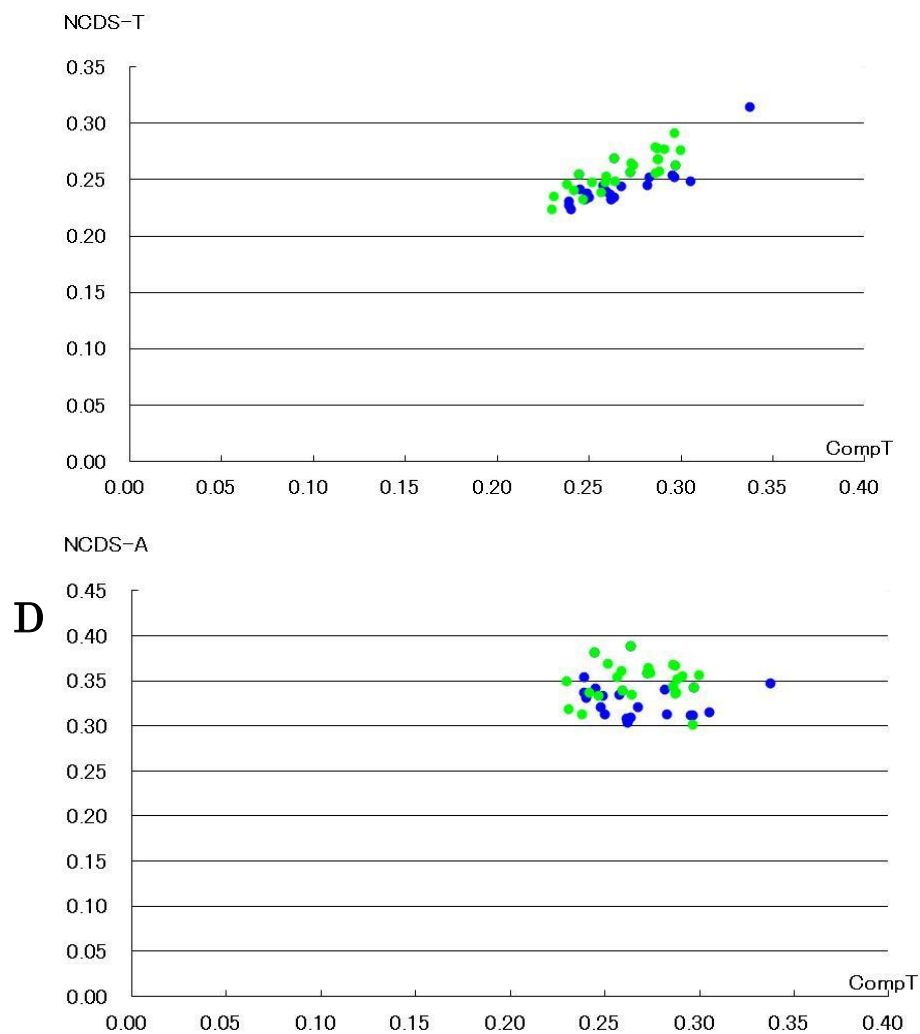
**Fig. (1) Supplementary.** Nucleotide relationships in normalized vertebrate mitochondrial values. The vertical axis represents G, C, T and A contents of the coding region on graphs A, B, C and D, respectively, The horizontal axis represents C, T or A content of the complete mitochondrial genome in page order, respectively. Green and blue represent terrestrial and aquatic vertebrates, respectively. Statistical differences between terrestrial and aquatic vertebrates were evaluated using a Student's *t*-test. In the complete mitochondrial genome, C content;  $p > 0.05$ , T content;  $p > 0.05$ , A content;  $p < 0.01$ .



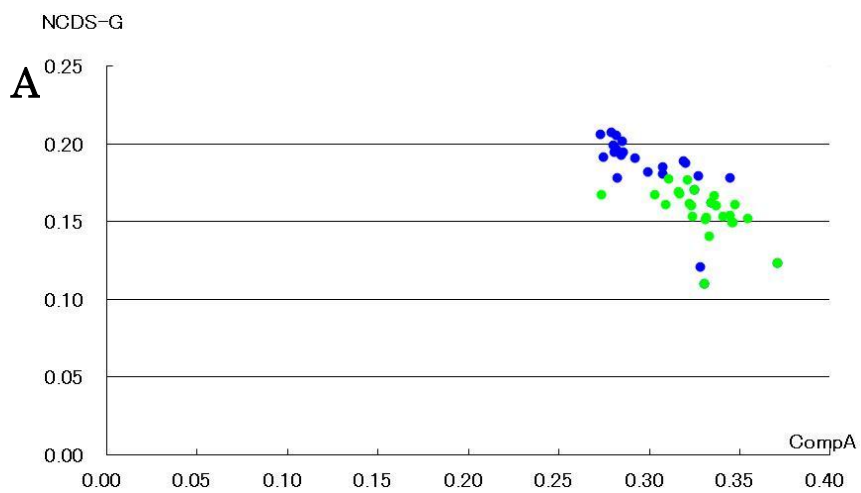


2-1

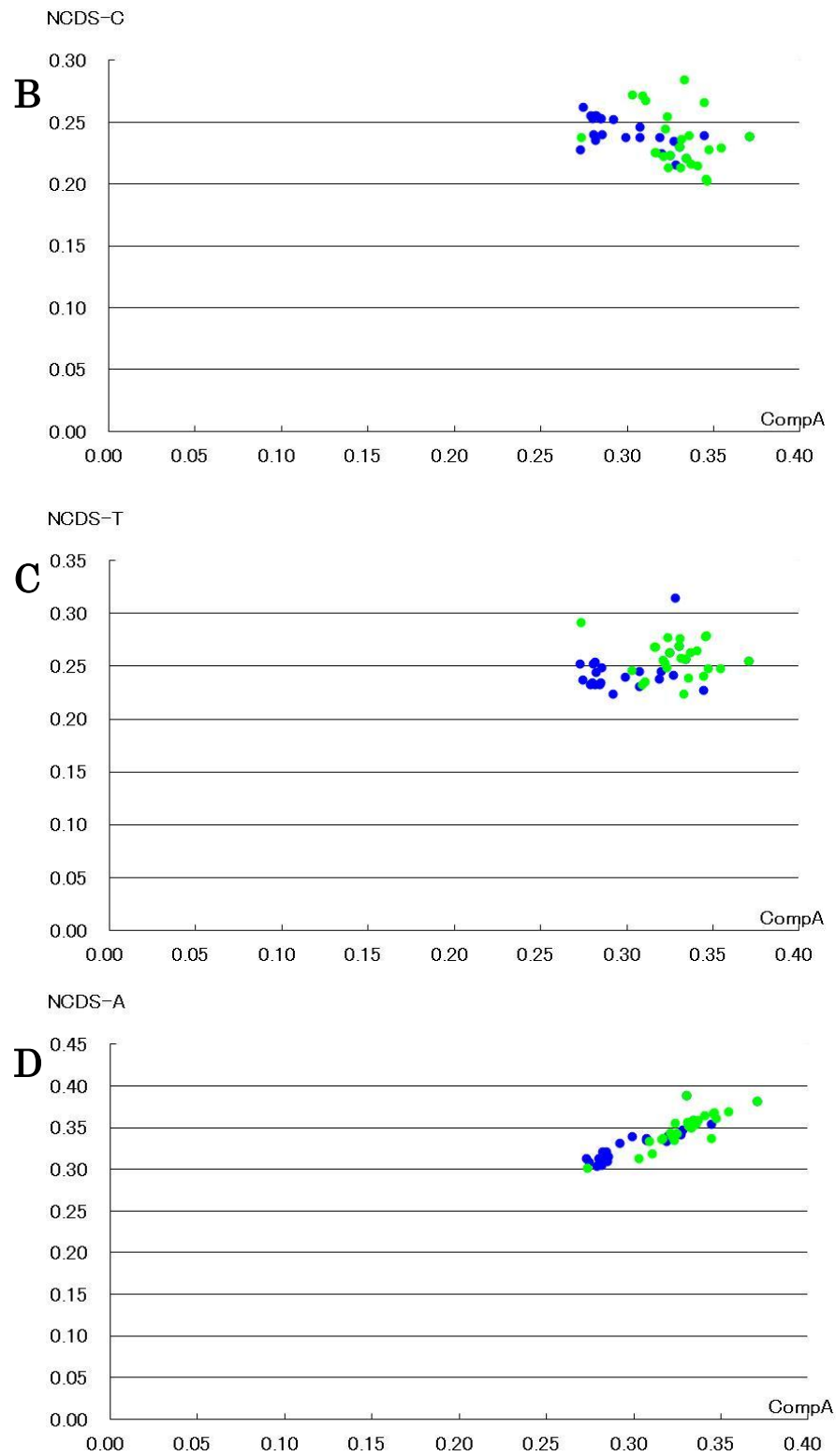




2-2







2-3

**Fig. (2) Supplementary.** Nucleotide relationships in normalized vertebrate mitochondrial values. The vertical axis represents G, C, T and A contents of the non-coding region on graphs A, B, C and D, respectively. The horizontal axis represents C, T and A contents of the complete mitochondrial genome in page order. Green and blue represent terrestrial and aquatic vertebrates, respectively.