

How rapid can aquatic large dsDNA viruses adapted to their changing algae host?

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Chlorovirus evolution is characterized by strong selection and high mutation supply.

We studied the evolutionary change of Paramecium bursaria chlorella virus 1 during experimental coevolution with its algal host across six experimental replicates and found single nucleotide polymorphisms (SNPs) at sixty-seven sites. The occurrence of genetic variants was highly repeatable and three genes showed an excess of variable sites, providing new information about potential targets of selection during Chlorella—Chlorovirus coevolution. Our data indicated that the studied populations were not mutation-limited and experienced strong positive selection and with that highlighted relevant processes governing the evolution of aquatic large dsDNA viruses.

Related Links

Publikation - Strong selection and high mutation supply characterize experimental Chlorovirus evolution

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