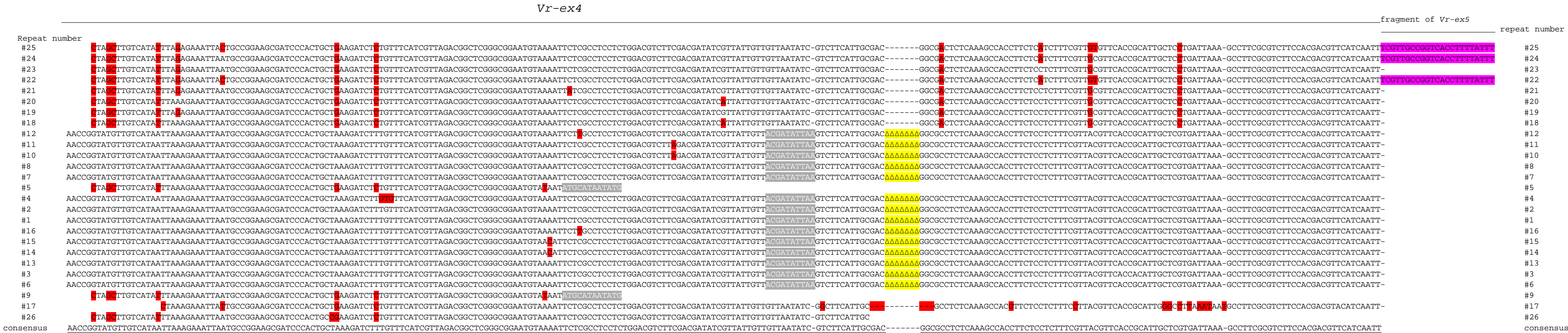


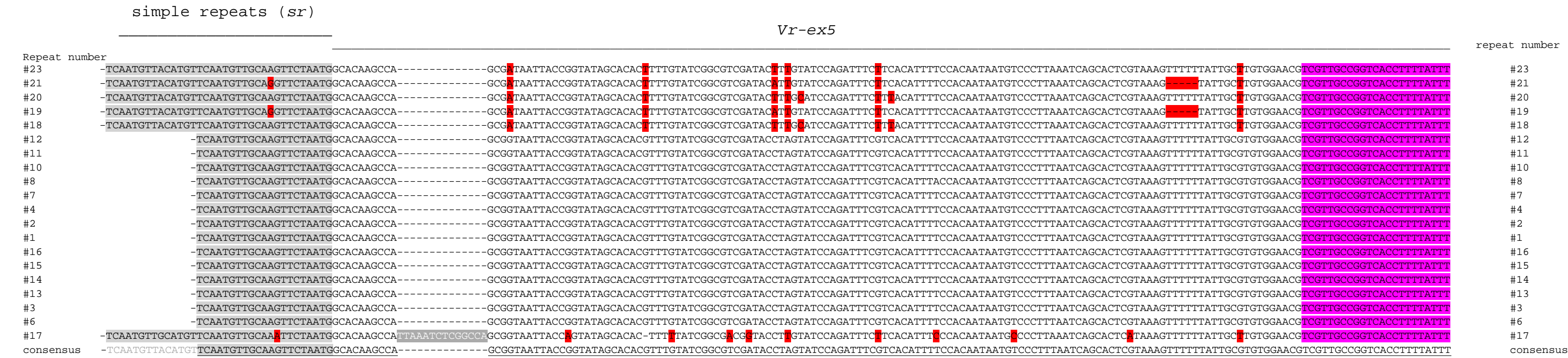
A

*AT-chX* repeats, *Vr-ex4* parts



B

*AT-chX* repeats continuation, *Vr-ex5* parts



**Figure S1.** Alignment of *AT-chX* repeats.

Multiple alignments were performed using Clustal W algorithm and subsequent manual adjustment. Substitutions of nucleotide positions and deletions are marked by red color. Consensus sequences are presented on the bottom of corresponding alignment blocks. **(A)** Alignment of *Vr-ex4* parts of *AT-chX* repeats. Sites of internal insertions of transposons and genomic repeat (*gr*) are designated as ΔΔΔΔΔΔ in yellow boxes. Sequences of large internal insertions are not included. Short insertions here and after are marked by white letters in grey boxes. *Vr-ex4* parts of the repeats with numbers #22, 24, 25 are fused directly with 23 nt end fragments of *Vr-ex5* part (marked by violet color boxes). **(B)** Alignment of *Vr-ex5* parts of *AT-chX* repeats. Simple repeats (*sr*) which connected *Vr-ex4* and *Vr-ex5* parts are shown by light grey color boxes upstream *Vr-ex5* part. 23 nt end fragments of *Vr-ex5* parts are marked by violet color boxes as in (A).