



**FIG. S1.** Alignment of the nucleotide (nt) sequences of the variable region [LIR], C4 gene and the 5' end of the C1 [Rep] gene; see Fig. 2C) of isolates of three genotypes of Tomato leaf deformation virus (ToLDeV). Vertical brackets show isolates of the ToLDeV PA98-1 and PA98-2 variants and the PA10 strain. The nt sequences were aligned using MUSCLE and were presented using Jalview v.2 (73). Intensity of the shading reflects the relative sequence identity among genotypes. Dark shading shows identical nt in all genotypes, light shading shows identical nt in two genotypes and no shading shows nt different in the genotypes. The TAATAT-TAC sequence of the conserved stem-loop structure is indicated in a box, and the inverted repeats that constitute the stem (RAS, right arm stem and LAS, left arm stem) are indicated with arrows. The thick red and black arrows on the top of sequences indicate the location of the C4 gene and the 5' end of the C1 (Rep) gene, respectively. Horizontal brackets at the bottom indicate potential recombination junctions.

