

## Supplemental figures

### **RcgA and RcgR, two novel proteins involved in conjugative transfer of rhizobial plasmids**

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**Keywords:** Rhizobia, plasmid, conjugation

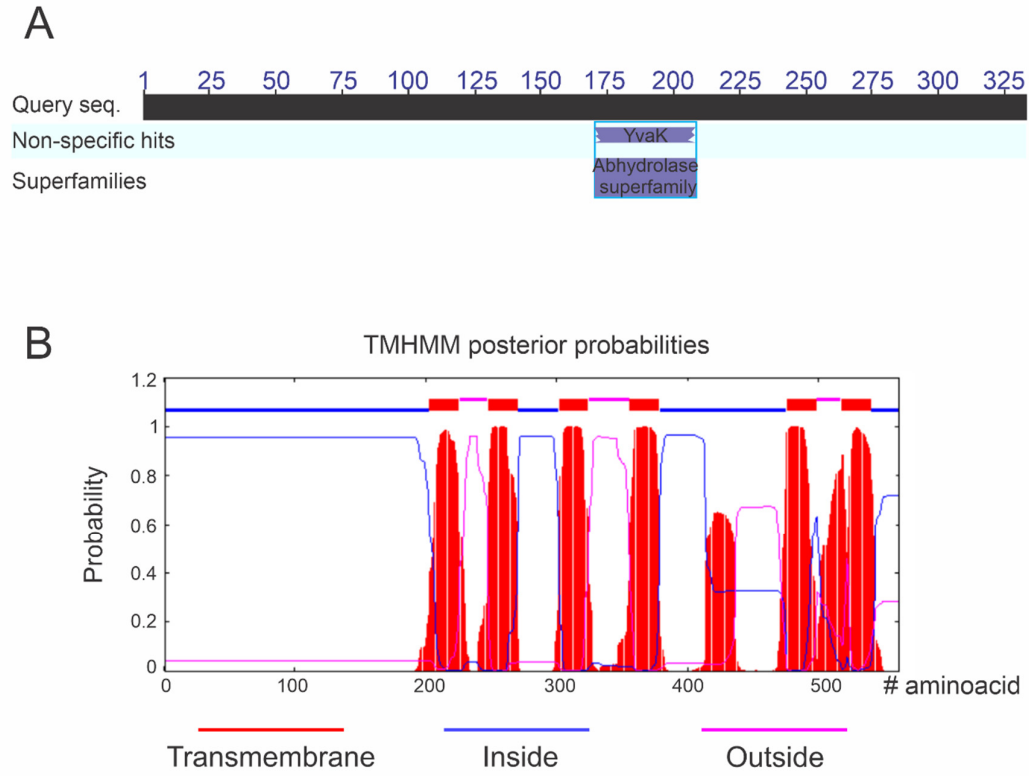
**Running title:** RcgA and RcgR, novel proteins involved in conjugation

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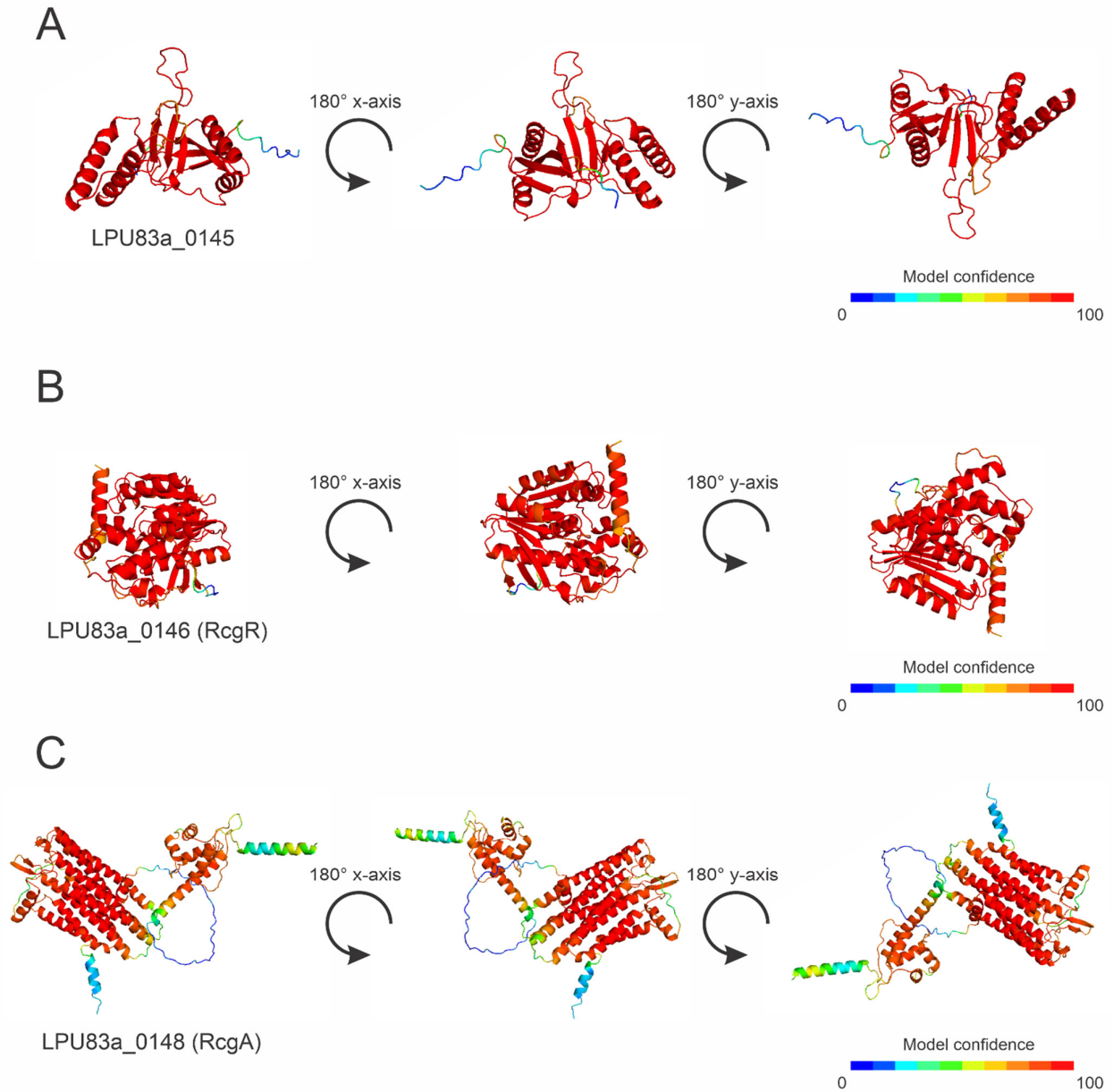
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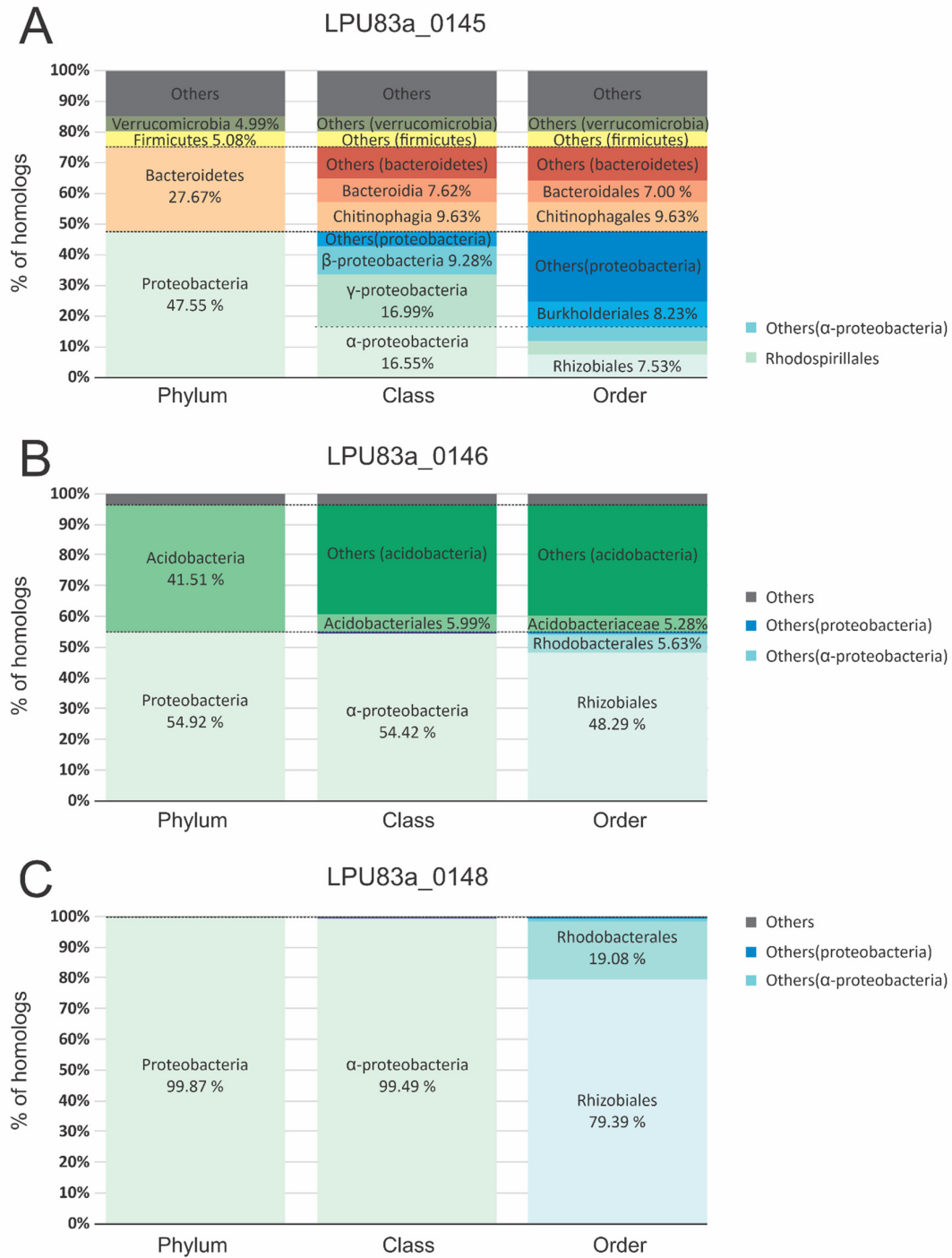
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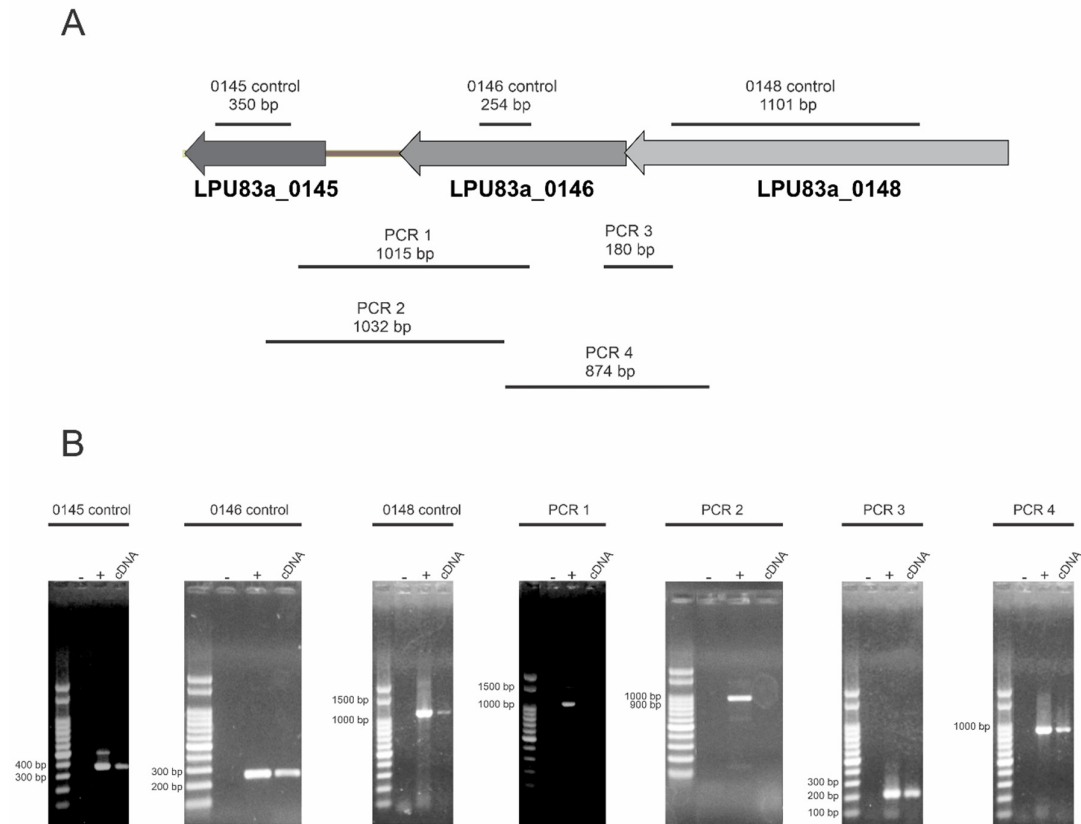
**Fig. S1. Bioinformatics analysis of LPU83a\_0146 and LPU83a\_0148.** A. putative  $\alpha/\beta$  hydrolase domain predicted for LPU83a\_0146. B. Transmembrane domains predicted for LPU83a\_0148 with TMHMM – 2.0



**Fig. S2. Predicted structural models for LPU83a\_0145 (A), LPU83a\_0146 (B) and LPU83a\_0148 (C).** For each protein, different angles of the structure predicted by Alphafold are shown.



**Fig. S3. Analysis of the taxonomic distribution of homologous genes.** Taxonomic distributions of homologs to LPU83a\_0145 (A), LPU83a\_0146 (B) and LPU83a\_0148 (C) are shown. Homologs were searched for by BLASTP. Percentages are specified only when they are greater than 5%. Dotted lines indicate continuity between columns.



**Fig. S4. Genetic organization of LPU83a\_0145, LPU83a\_0146 and LPU83a\_0148. A.** Scheme of the designed PCRs for transcript analysis. **B.** Electrophoresis of the PCR products obtained using DNA (+) or cDNA as template.