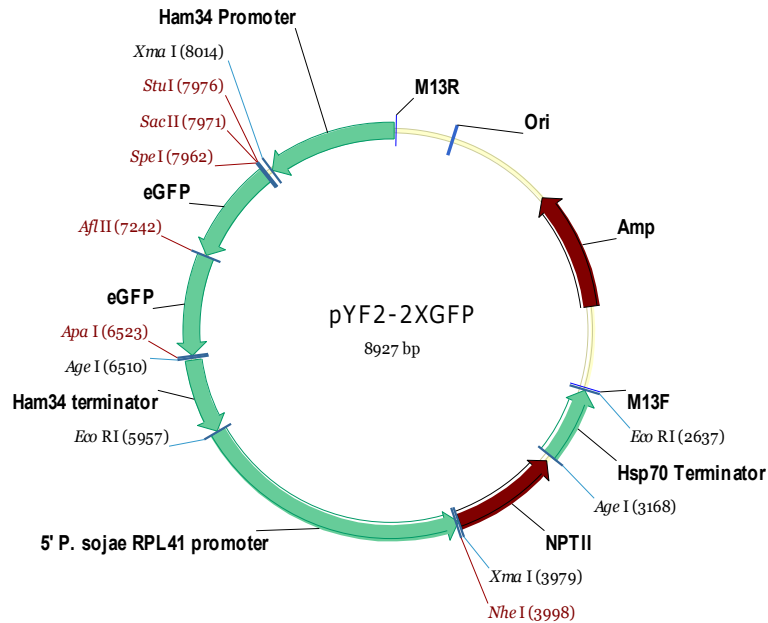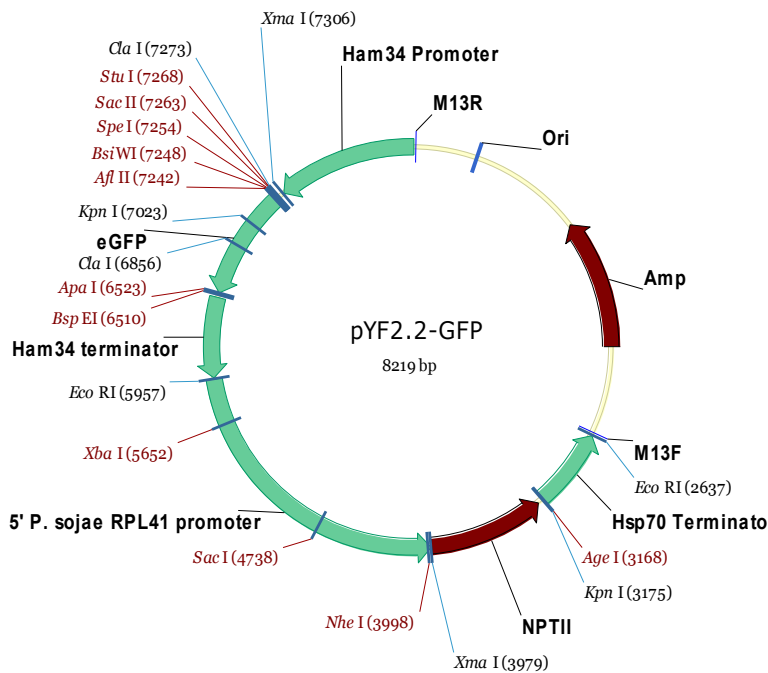**Fig. S4** Plasmid backbones used for expression of *hSpCas9* and sgRNA in *P. sojae*. (A) pYF2-2XGFP is used for tracking the subcellular localization and expression of PsNLS fused *hSpCas9*. PsNLS is inserted into *Sac* II and *Spe* I sites. *hSpCas9* is inserted into *Spe* I and *Afl* II sties for subcellular localization examination and *Spe* I and *Apa* I sites for CRISPR expression. (B) pYF2.2-GFP is used for expression of sgRNA (inserted into *Nhe* I and *Age* I sites).