

Fig. S4. FvCYP1, FvSCP1, FvSEL1 knockout strategies and Southern blot results

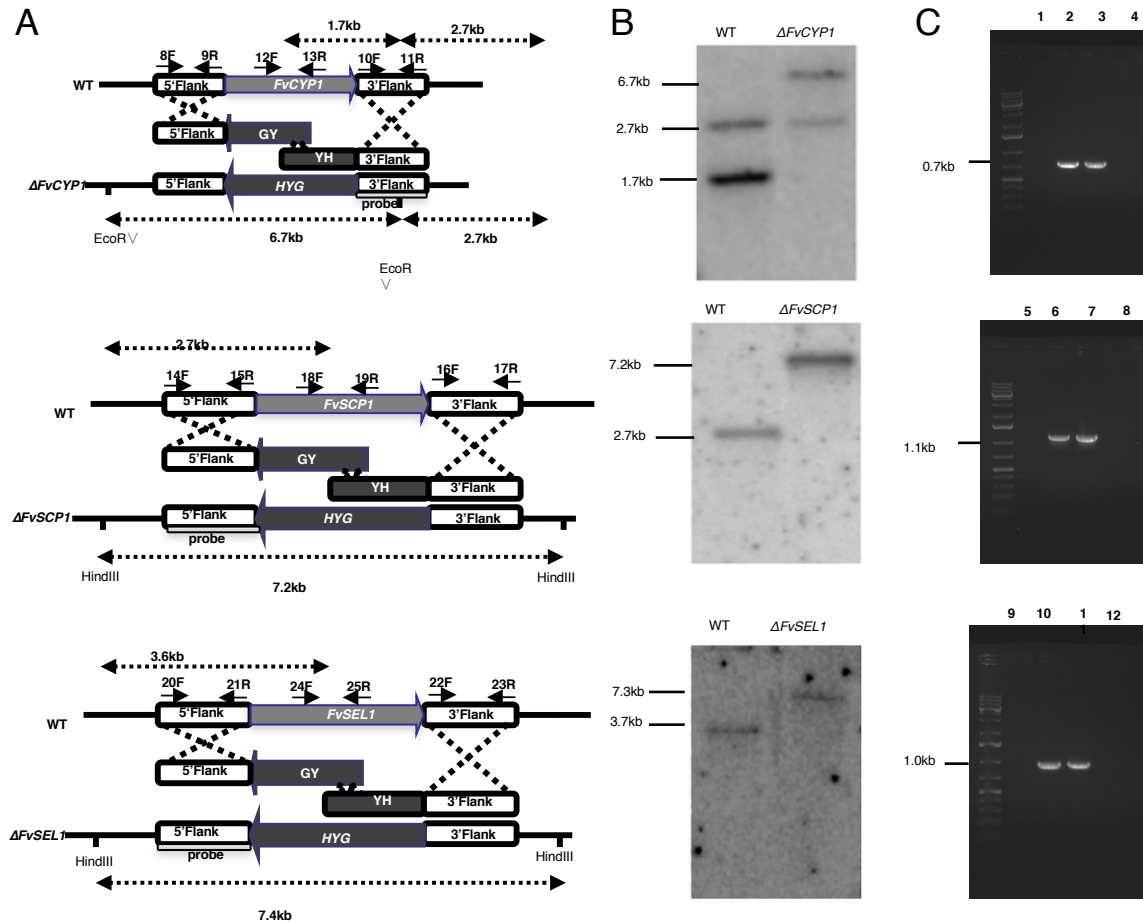


Fig. S4. (A) The targeted gene disruption was achieved by homologous recombination with following our standard split marker strategy. Disruption constructs were generated by single Joint-PCR, and Hygromycin phosphotransferase (*HYG*) was used as the selective marker. (B) The gene deletion was confirmed by Southern analysis. Anticipated band sizes before and after recombination are indicated on the left. (C) Complementation strains PCR screening was done by using the same set of primers to screen mutant strains: 1: $\Delta FvCYP1$; 2, *FvCYP1C*; 3, WT positive control; 4, Blank control; 5: $\Delta FvSCP1$; 6, *FvSCP1C*; 7, WT positive control; 8, Blank control; 9: $\Delta FvSEL1$; 10, *FvSEL1C*; 11, WT positive control; 12, Blank control. PCR screenings were performed at least three times with same results.