

Description of Additional Supplementary Files

Supplementary Data 1. Daily temperature in Shanghai and Hainan

Supplementary Data 2. The results of LC-MS/MS analysis.

Supplementary Data 3. Summary of RNA-seq and small RNA profiles generated in this study.

Supplementary Data 4. Heat-related DGEs in heat-stressed 2537, *oss3a-1*, NIP, *osarf3ab* and *osarf3alb* knock-out mutants.

Supplementary Data 5. Immunity-related DGEs in NIP and OsSGS3 RNAi transgenic plants after inoculation with TH12 for 24 h.

Supplementary Data 6. Primers used in this study.

Supplementary Data 7. Statistical summary—a summary of all statistical analysis by ANOVA.