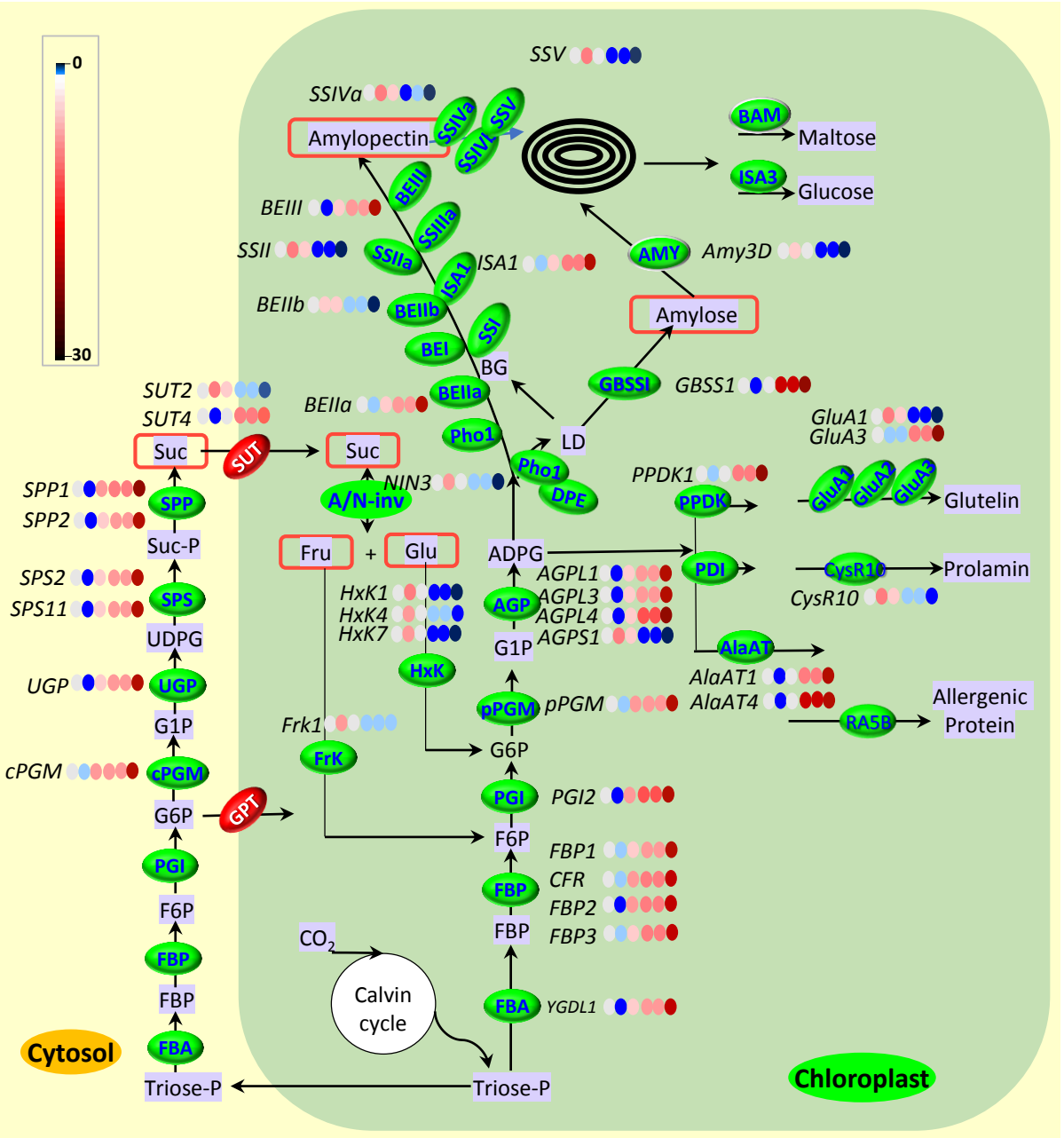

Fig. S3 Graphical representation for expression levels of genes involved in starch biosynthesis of 35 DAG seedlings in leaves.

The small round balls represent the relative mRNA expression relative to WT and internal parameters. The depth of the color indicates the amount of expression. The orders of colored balls were WT, WT+suc, WT+suc+NF, MT, MT+suc, MT+suc+NF. Italics are genes Grey fonts represent metabolites. The large green and red balls represent enzymes and transports, respectively. *Abbreviations:* FBA, Fructose-1,6-bisphosphate aldolase; FBP, Fructose 1,6-bisphosphate; PGI, Phosphoglucoseisomerase; PGM, Phosphoglucomutase; SPS, Sucrose-phosphate-synthase; SPP, Sucrose phosphate phosphatase; NIN3, Alkaline/neutral invertase; FrK, Fructokinase; HxK, Hexokinase; A/N-inv, alkaline/neutral invertase; SUS, Sucrose synthase; AGPL, ADP-glucose pyrophosphorylase large subunit; AGPS, ADP-glucose pyrophosphorylase small subunit; UGP, UDP-glucose pyrophosphorylase; SSI, II, III, IV, V, Soluble starch synthase I, II, III, IV, V; GBSSI, II, Granule bound starch synthase I, II; BE I, II, III, Starch branching enzyme I, II, III; PUL, pullulanase; ISA1, 2, 3, Isoamylase 1, 2, 3; FLO, Floury; DPE1, 2, Disproportionating enzyme; Pho1, 2, Plastidial starch phosphorylase1, 2; AlaAT1, 4, Alanine aminotransferase 1, 4; PDI, Protein disulfate isomerase; PPDK, Pyruvate orthophosphate dikinase; Amy3D, α-amylase 3D; GluA1, GluA3, glutelins A1, A3; CysR10, prolamin; SUT, Sucrose transporter; F6P, fructose-6-phosphate; G6P, glucose-6-phosphate; G1P, glucose-1-phosphate; ADPG, ADPglucose; UDPG, UDPglucose; Suc-P, sucrose-phosphate; LD, Linear dextrin; BG, Branched glucan; Suc, Sucrose; Fru, Fructose; Glu, Glucose; AAs, Amino acids.