

Table S8. Genes implicated in the CAM pathway undergoing positive selection as revealed from Ka/Ks ratio calculated from *Agave-Arabidopsis*, *Agave-Oryza* and *Agave-Zea* orthologous gene pairs.

Agave gene	Name	Description	Function Category	Ortholog clade**
Aam048341 ^b	PPCK1	Phosphoenolpyruvate carboxylase kinase 1	Carbon fixation	C ₃ :CAM:C ₄
Aam048752 ^a	PCL1 or LUX	PHYTOCLOCK 1	Circadian-core	NVP:C ₃ :CAM:C ₄
Aam006353 ^a	LHY	LATE ELONGATED HYPOCOTYL	Circadian-core	C ₃ :CAM:C ₄
Aam085988 ^a	ELF3	EARLY FLOWERING 3	Circadian-input	NVP:C ₃ :CAM:C ₄
Aam051010 ^a	PPDK-RP	PPDK regulatory protein	Decarboxylation light reaction	NVP:C ₃ :CAM:C ₄
Aam002877 ^b	Psi-D2	Photosystem I subunit D-2	Photosynthesis-PET	NVP:C ₃ :CAM:C ₄
Aam088315 ^a	GAUT7	Galacturonosyltransferase 7	Starch and sucrose metabolism	C ₃ :CAM:C ₄
Aam082045 ^a	SS2	Starch synthase 2	Starch and sucrose metabolism	NVP:C ₃ :CAM:C ₄
Aam049326 ^a	CT-BMY	Chloroplast beta-amylase	Starch and sucrose metabolism	NVP:C ₃ :CAM:C ₄

*Note: “a” indicates Ka/Ks ratio greater than one in *Agave-Arabidopsis*, *Agave-Oryza* and *Agave-Zea* orthologous gene pair comparison. “b” indicates Ka/Ks ratio greater than one in *Agave-Arabidopsis* and *Agave-Oryza* and but not *Agave-Zea* orthologous gene pair comparison.

**NVP:C₃:CAM:C₄ represents orthologs shared by NVP, C₃, CAM and C₄. C₃:CAM:C₄ represents orthologs shared only by C₃, CAM and C₄.