

**Table S17. Number of genes related to fruit softening in the *A. montana* genome.**

Type	Gene	Description	Number	Enzyme Commission
Starch degradation coding gene	AMY	$\alpha$ -amylase	4	EC:3.2.1.1
	AGL	$\alpha$ -glucosidase	2	EC:3.2.1.20
	BAM	$\beta$ -amylase	12	EC:3.2.1.2
	DPE	4- $\alpha$ -glucanotransferase	2	EC:2.4.1.25
	GWD	glucan, water dikinase	2	EC:2.7.9.4
	ISA	isoamylase	3	EC:3.2.1.68
	PHS	glucan phosphorylase	6	EC:2.4.1.1
	PWD	phosphoglucan, water dikinase	1	EC:2.7.9.5
Cellulose degradation and cell-wall softening coding enzymes genes	$\beta$ -GAL	$\beta$ -galactosidase	2	EC:3.2.1.23
	XY	$\beta$ -xylosidase	8	EC:3.2.1.37
	RG	rhamnogalacturonase	3	EC:4.2.2.23
	EG	endoglucanase	15	EC:3.2.1.4
	PL	pectate lyase	14	EC:4.2.2.2
	PG	polygalacturonase	30	EC:3.2.1.15/EC:3.2.1.67
	PME	pectin methylesterase	45	EC:3.1.1.11
	$\alpha$ -L-Af	$\alpha$ -L-Arabinofuranosidase	12	EC:3.2.1.55
	XET	Xyloglucan endotransglucosylase	29	EC:2.4.1.207
BG	beta-glucosidase	35	EC:3.2.1.21	