

Additional File 4: Ethylene measurements during storage

Materials and Methods:

The fruits were sampled in 2010 and 2011 for ethylene quantification during storage. Ten fruits were transferred to a hermetically closed container and ethylene contents were analysed using an Ethylene Atmosphere Sampling Instrument (EASI-1, Absoger France). To identify any statistical differences between mealy and non-mealy apples, student tests were performed at each time point.

Results:

Ethylene accumulation in fruits from individual hybrids. The values represent the mean of 10 measurements. Results of student test at each time point between mealy and non-mealy are mentioned below.

Phenotype	Hybrid	2010		2011	
		H	60DAH	60DAH	120DAH
NM	M16	0,17	33,92	5,11	44,10
NM	M20	0,88	2,61	-0,64	-1,79
NM	M49	0,65	5,49	0,87	29,71
M	M40	1,94	5,25	0,77	6,81
M	M48	1,41	59,87	27,26	61,12
M	M74	6,89	103,82	31,16	36,14

Results of student test: 0,24 0,38 0,25 0,75