Electronic Supplementary Material (ESI) for Analyst.

Supplemental Table 1. Observed and calculated *m/z* for fatty acid methyl esters detected by DART MS analysis of *Drosophila* extracts.

Observed *m/z* $[M+H]^+$	Calculated *m/z* $[M+H]^+$	FA notation[1]	Elemental composition[2]	Expected O_3 products $[M-H]^-$	
				Ketone	Aldehyde
199.173	199.170	11:0	C12 H23 O2		
215.204	215.201	12:0	C13 H27 O2		
227.208	227.201	13:1	C14 H27 O2	unknown	unknown
229.215	229.217	13:0	C14 H29 O2		
239.198	239.201	14:1 (9)	C15 H27 O2		
			C5 H10 O/ C5 H10 O2	85.065	101.060
			C10 H18 O3/ C10 H18 O4	185.117	201.112
241.221	241.217	14:0	C15 H29 O2		
257.252	257.248	15:0	C16 H33 O2		
269.253	269.248	16:1 (9)	C17 H33 O2		
			C9 H18 O/ C9 H18 O2	141.127	157.122
			C8 H14 O3/ C8 H14 O4	157.086	173.081
271.269	271.264	16:0	C17 H35 O2		
283.268	283.264	17:0	C18 H35 O2		
293.252	293.248	18:3	C19 H33 O2	unknown	unknown
295.268	295.264	18:2 (9,12)	C19 H35 O2		
			C6 H12 O/ C6 H12 O2	99.082	115.076
			C9 H16 O/ C9 H16 O2	139.113	155.108
			C10 H18 O3/ C10 H18 O4	185.118	201.113
			C13 H22 O3/ C13 H22 O4	225.150	241.145
295.268	295.264	18:2 (10,12)	C19 H35 O2		
			C6 H12 O/ C6 H12 O2	99.082	115.077
			C8 H14 O/ C8 H14 O2	125.097	141.092
			C11 H20 O3/ C11 H20 O4	199.134	215.129
			C13 H22 O3/ C13 H22 O4	225.150	241.145
297.284	297.279	18:1 (9)	C19 H37 O2		
			C9 H18 O/ C9 H18 O2	141.120	157.115
			C10 H18 O3/ C10 H18 O4	185.118	201.113
299.298	299.295	18:0	C19 H39 O2		

[1]Fatty acid (FA) notation denotes the carbon number followed by carbon-carbon double bond number with the site(s) of unsaturation in brackets. Double bond position was confirmed by GCMS (see Experimental).
[2]Elemental composition corresponds to the esterified fatty acid.