Supplements

Fig. 1S. Principal component analysis (PCA) of fatty acid (FA) composition in the alga *T. minutus* cultivated at 10 °C, 25 °C and 32 °C (data from this paper). The first two canonical axes are plotted; they explained 99.0 % of the variability. For FA abbreviations, see Table 1.

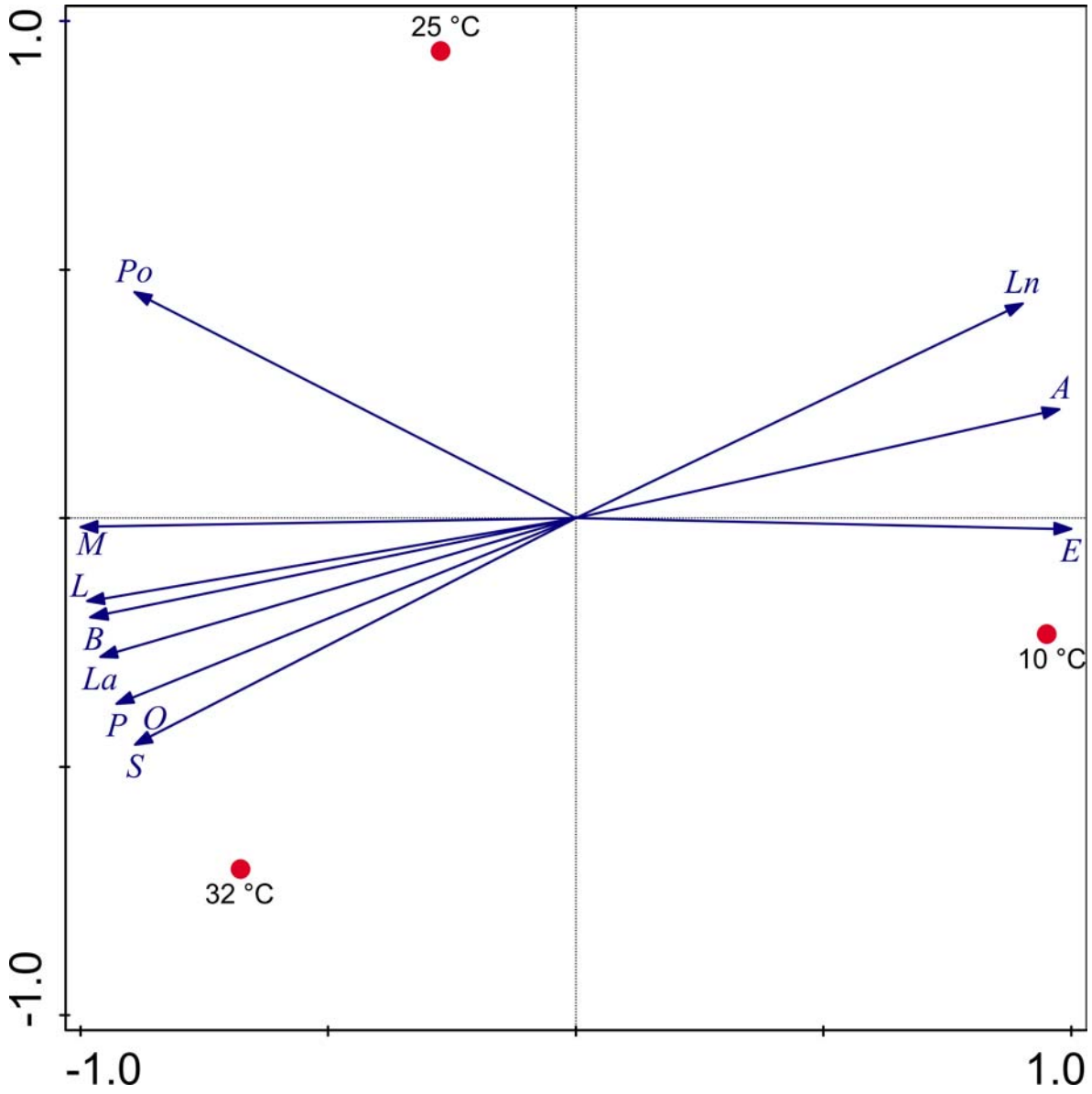

Fig. 2S. Principal component analysis (PCA) of fatty acid (FA) composition in the alga *T. minutus* cultivated at 10 °C, 25 °C and 32 °C (data from Cepák et al., 2014). The first two canonical axes are plotted; they explained 97.1 % of the variability. For FA abbreviations, see Table 1.

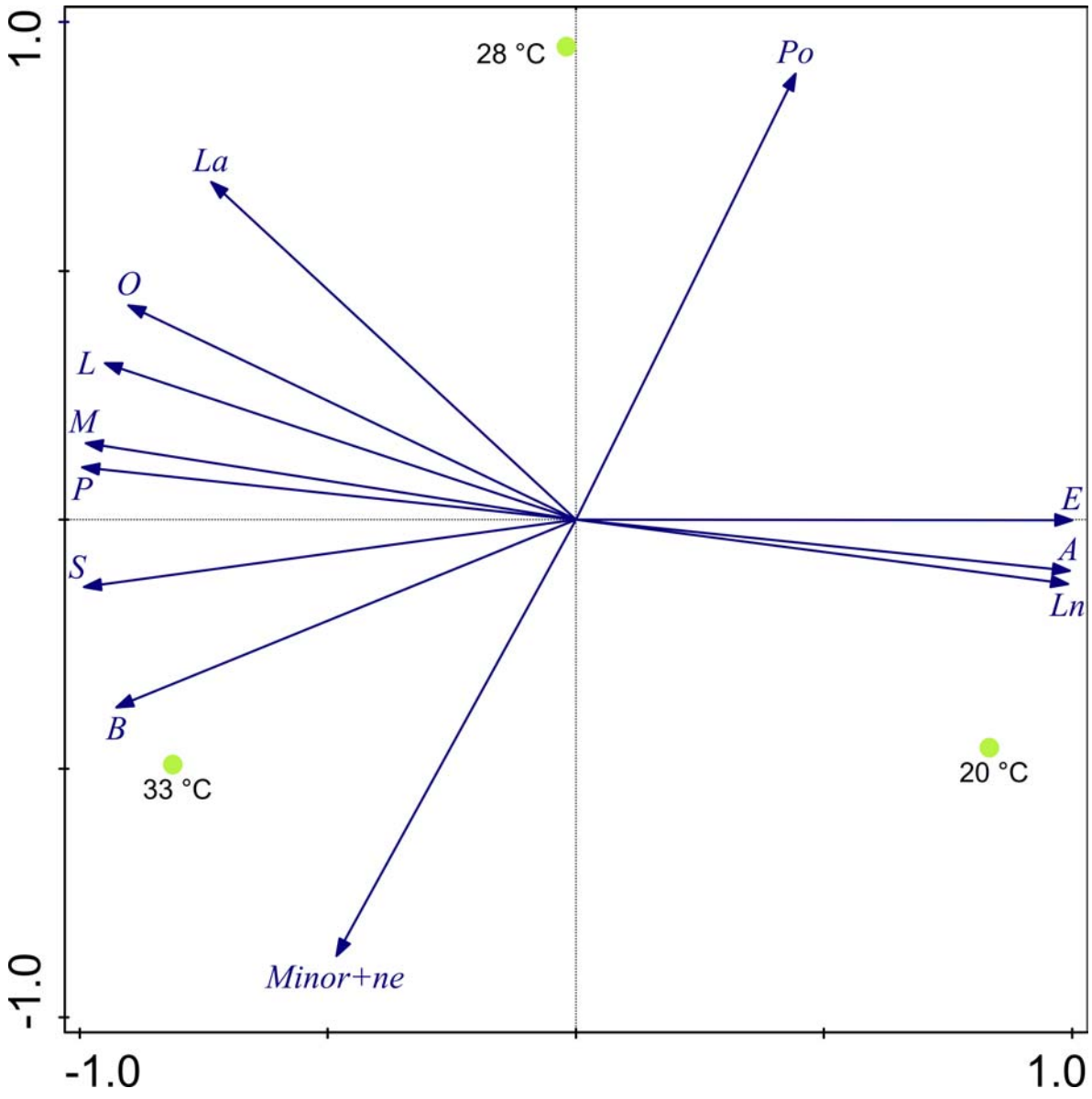

Fig. 3S. Tandem mass spectrum of natural EEE TAG.

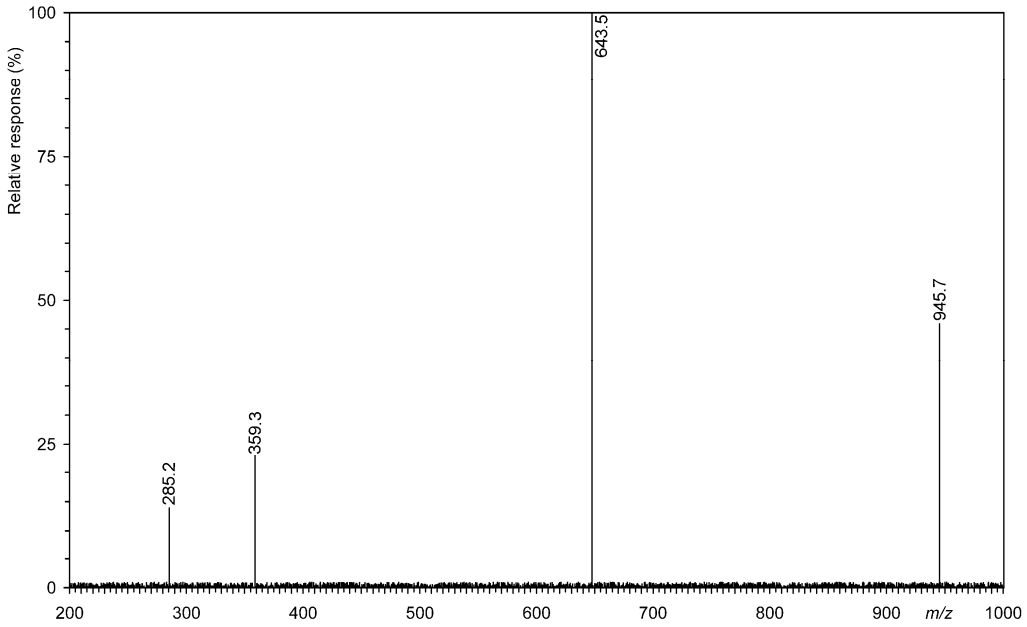

Fig. 4S. Tandem mass spectrum of synthetic EEA TAG.

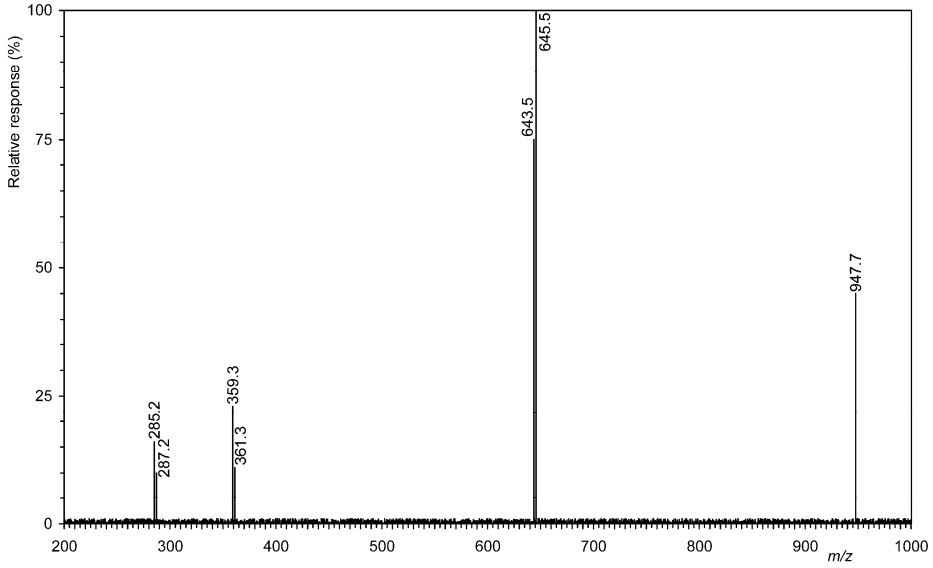

Fig. 5S. Tandem mass spectrum of natural AEE TAG.

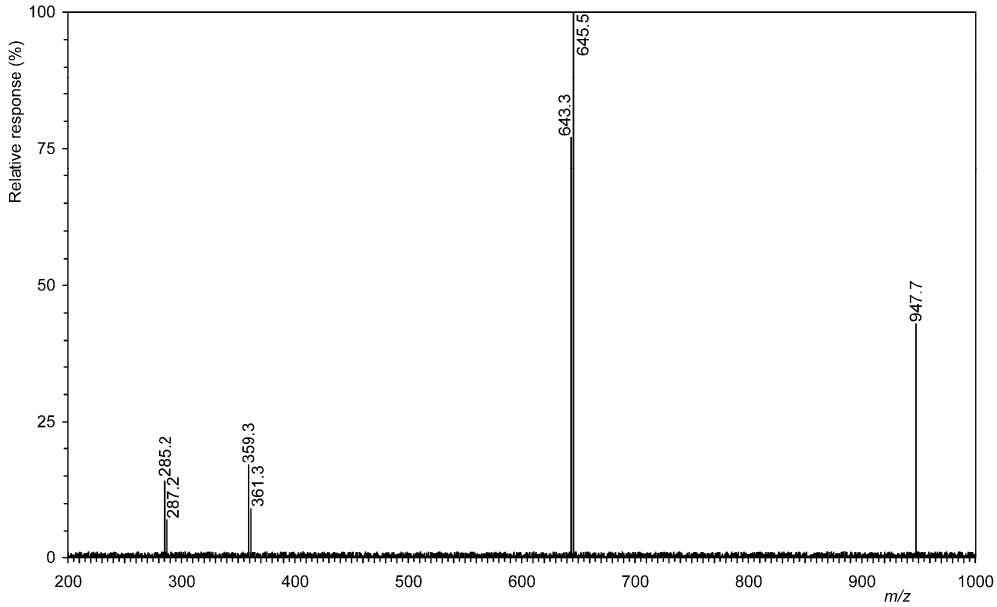

Fig. 6S. Tandem mass spectrum of natural EAE TAG.

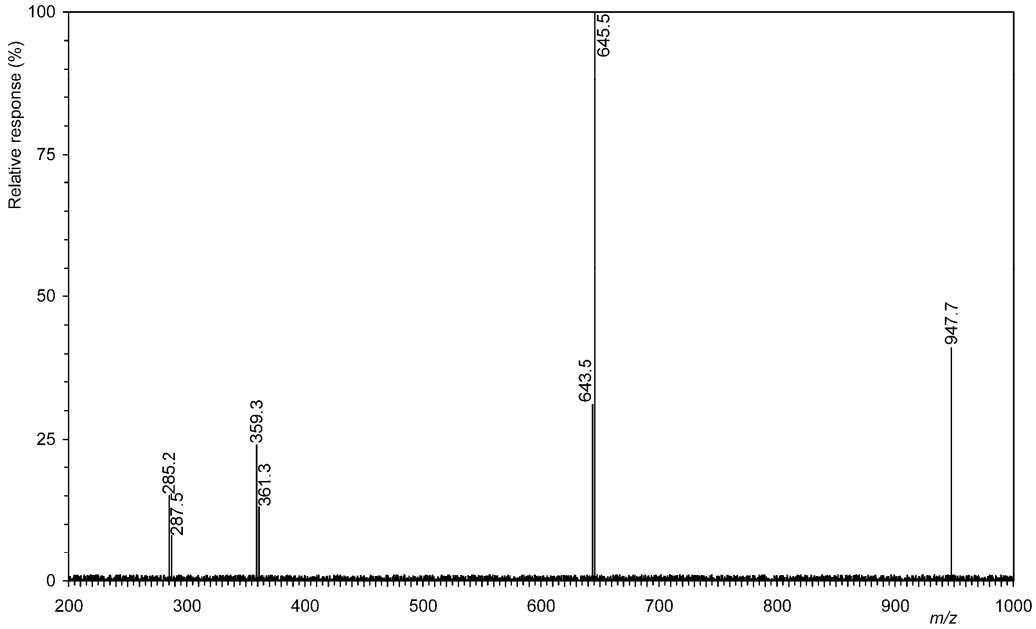

Fig. 7S. Tandem mass spectrum of synthetic AAE TAG.

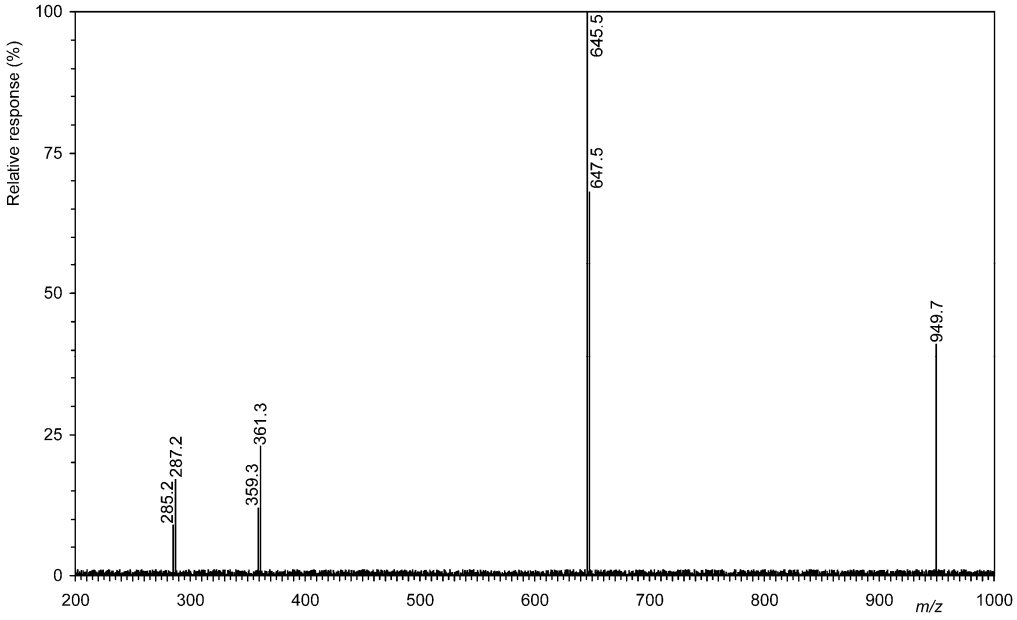

Fig. 8S. Tandem mass spectrum of natural EAA TAG.

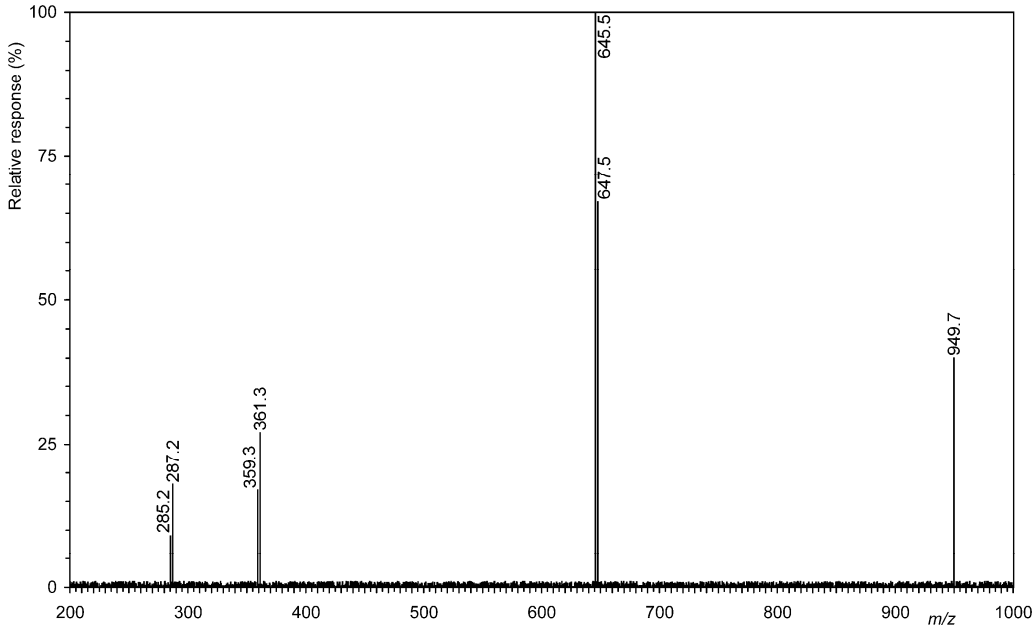

Fig. 9S. Tandem mass spectrum of natural AEA TAG.

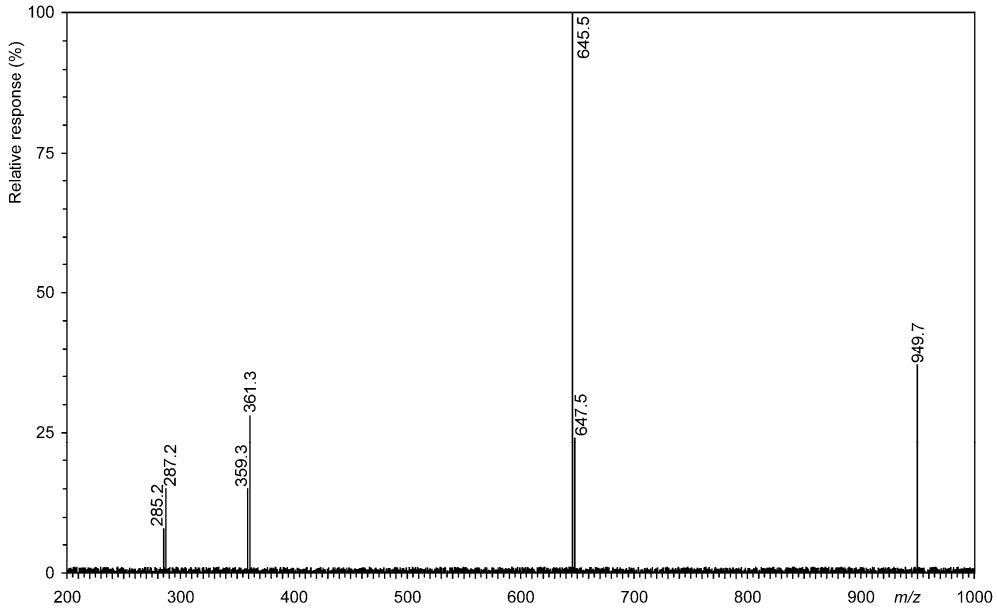

Fig. 10S. Tandem mass spectrum of natural AAA TAG.

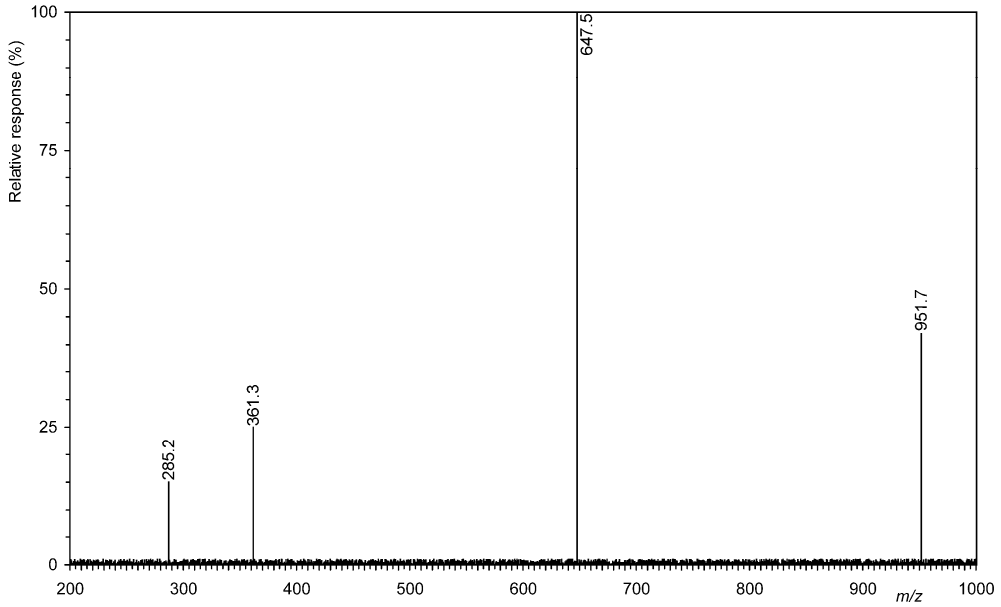

Fig. 11S. Principal component analysis (PCA) of TAG composition in the alga *T. minutus* cultivated at 10 °C, 25 °C and 32 °C (all measured TAGs included). The first two canonical axes are plotted; they explained 96.1 % of the variability. For FA abbreviations, see Table 1.

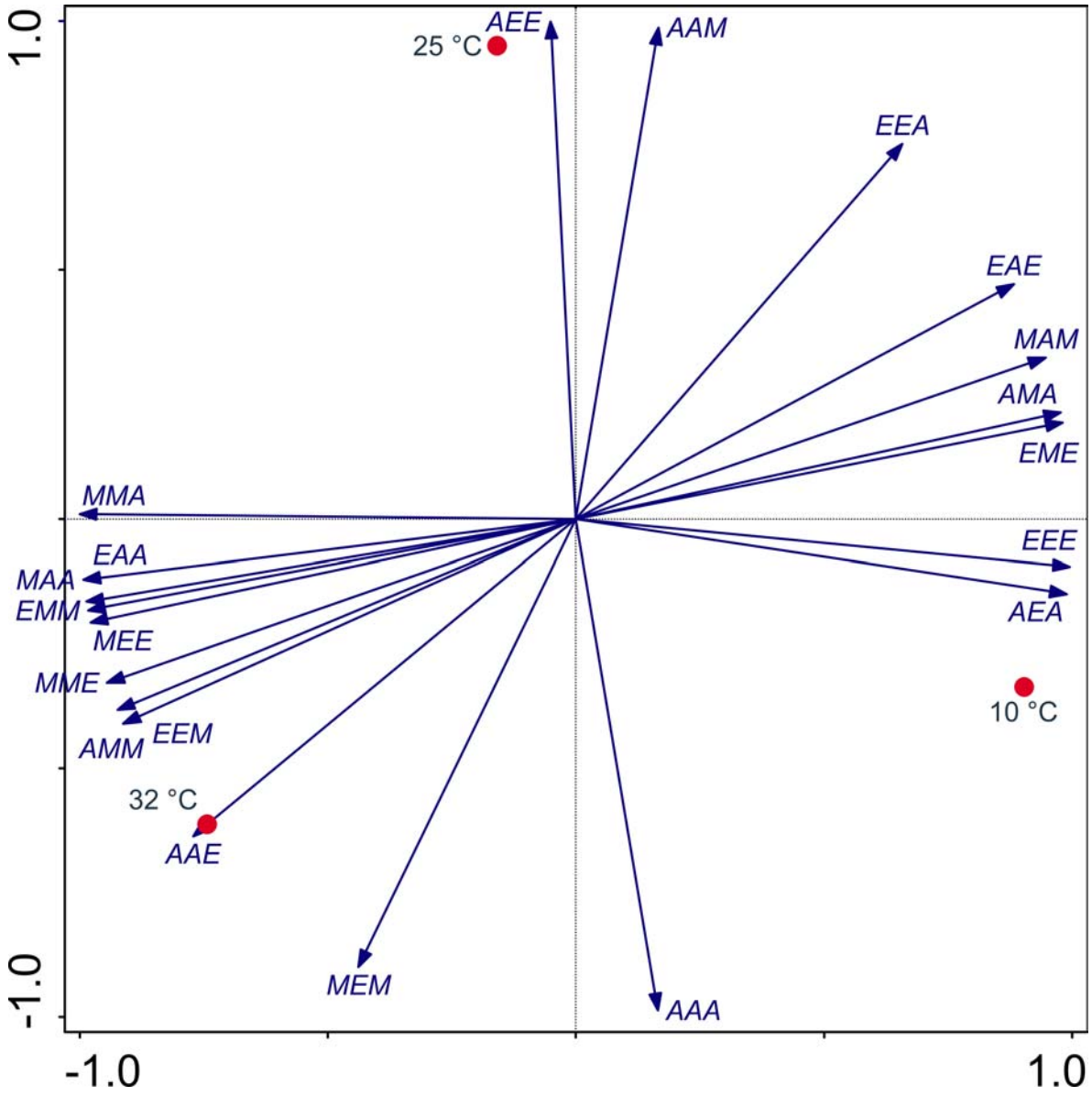

Table 12S. The ratio of enantiomers and diastereoisomers synthetized from appropriate free acids and 1,2-diacyl-*sn*-glycerol.

TAG	sn-AAB[a]	ABA	sn-BAA
MMA	97	0	3
MME	96	0	4
AAM	94	1	5
EEM	92	2	6
AAE	88	3	9
EEA	89	3	8

[a] in boldface – the molecular species we wanted to synthesize