## **Electronic Supplementary Information**

## The identification of glycolaldehyde, the simplest sugar, in plant systems

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**Fig. S1** (a) (b) LC-MS total ion count (TIC) and extracted ion count (EIC, 222.0696) of MBTH standard sample, respectively. (c) High resolution mass spectrometry of a sample with a retention time of 9.58 min. On the mass spectrometer, all the experiments were performed in positive electrospray ionization (ESI) mode.



**Fig. S2** (a) (b) LC-MS total ion count (TIC) and extracted ion count (EIC, 222.0696) of *Chlorella*, respectively. On the mass spectrometer, all the experiments were performed in positive electrospray ionization (ESI) mode.



**Fig. S3** (a) (b) LC-MS total ion count (TIC) and extracted ion count (EIC, 222.0696) of Spinach, respectively. On the mass spectrometer, all the experiments were performed in positive electrospray ionization (ESI) mode.



**Fig. S4** (a) (b) LC-MS total ion count (TIC) and extracted ion count (EIC, 222.0696) of maize, respectively. On the mass spectrometer, all the experiments were performed in positive electrospray ionization (ESI) mode.



**Fig. S5** (a) (b) LC-MS total ion count (TIC) and extracted ion count (EIC, 222.0696) of *Aeonium decorum f. variegate* of the genus Aeonium, respectively. On the mass spectrometer, all the experiments were performed in positive electrospray ionization (ESI) mode.