

## Supplementary material

### 12OHJA, 12OGlcJA, and JA-L-Val as airborne MeJA metabolites

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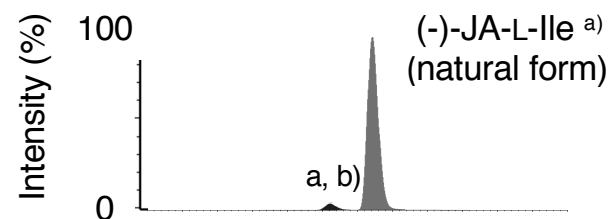
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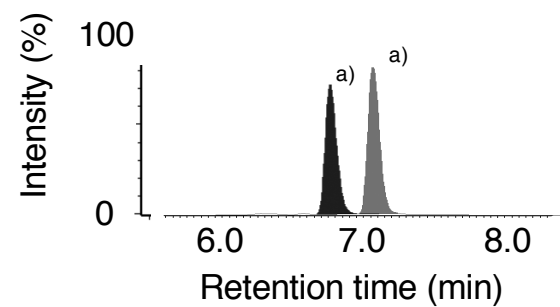
**Figure 1S.** Evaluation of the metabolites derived from airborne MeJA using a semi-closed container.

Size of the container: 25 x 28 x 40 cm<sup>3</sup>

A)



B)

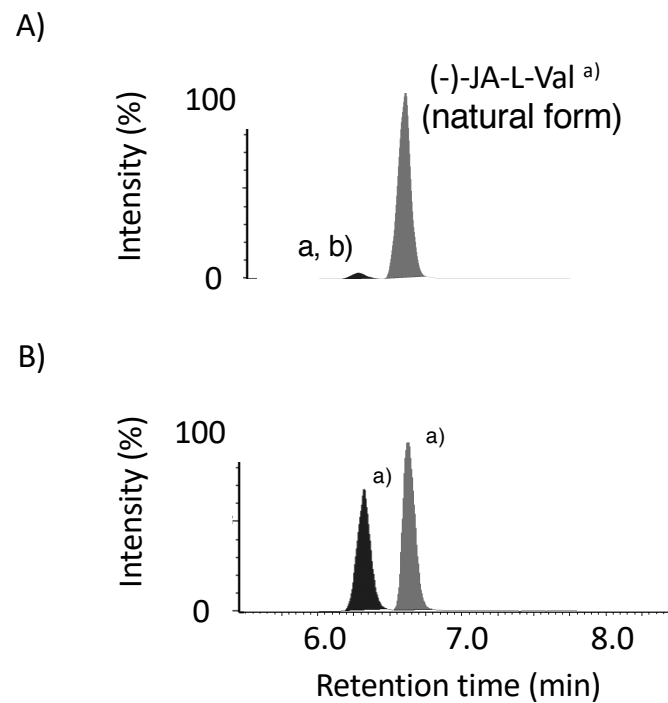


**Figure 2S.** UPLC MS/MS chromatograph analyzing (-)-JA-L-Ile and (±)-JA-L-Ile.

A) Analyzing (-)-JA-L-Ile synthesized from (-)-JA, B) Analyzing JA-L-Ile synthesized from (±)-JA and L-Ile.

a) The peak was monitored by selecting  $m/z$  322.03 as the pseudo molecular ion and  $m/z$  129.68 as the transition ion.

b) The peak derived from *cis* form of (-)-JA-L-Ile, namely (3*R*, 7*S*) JA-L-Ile

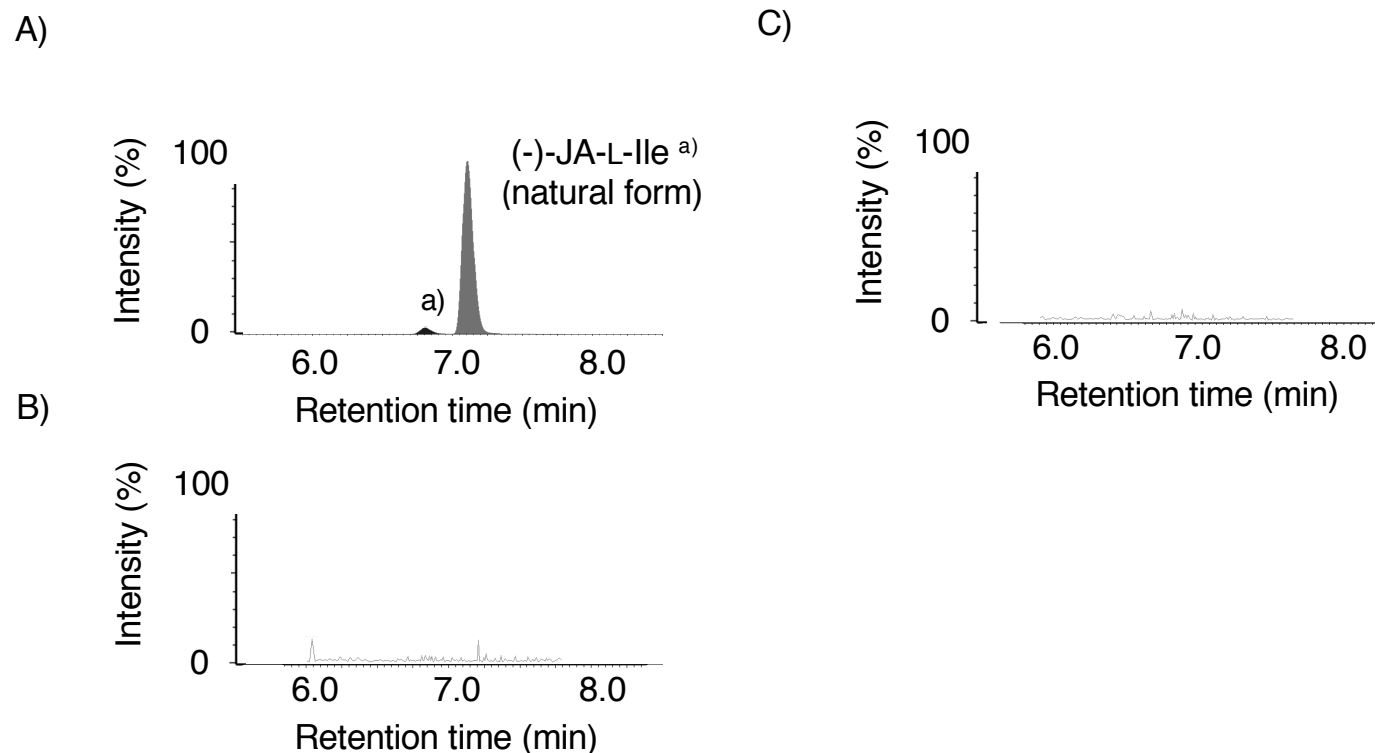


**Figure 3S.** UPLC MS/MS chromatograph analyzing (-)-JA-L-Val and (±)- JA-L-Val.

A) Analyzing (-)-JA-L-Val synthesized from (-)-JA, B) Analyzing JA-L-Val synthesized from (±)-JA and L-Val.

a) The peak was monitored by selecting  $m/z$  308.03 as the pseudo molecular ion and  $m/z$  115.58 as the the transition ion.

b) The peak derived from *cis* form of (-)-JA-L-Val, namely (3*R*, 7*S*) JA-L-Val



**Figure 4S.** UPLC MS/MS chromatograph analyzing JA-L-Ile.

A) Analyzing (-)-JA-L-Ile synthesized from (-)-JA. The peaks were monitored by selecting  $m/z$  322.03 as the pseudo molecular ion and  $m/z$  129.68 as the the transition ion. B) Analyzing (-)-JA-L-Ile-d<sub>5</sub> in the sample derived from (-)-MeJA non-treated plants. The peak was monitored by selecting  $m/z$  327.03 as the pseudo molecular ion and  $m/z$  129.68 as the the transition ion. C) Analyzing (-)-JA-L-Ile-d<sub>4</sub> in the sample derived from (-)-MeJA non-treated plants. The peaks were monitored by selecting  $m/z$  326.03 as the pseudo molecular ion and  $m/z$  129.68 as the the transition ion.