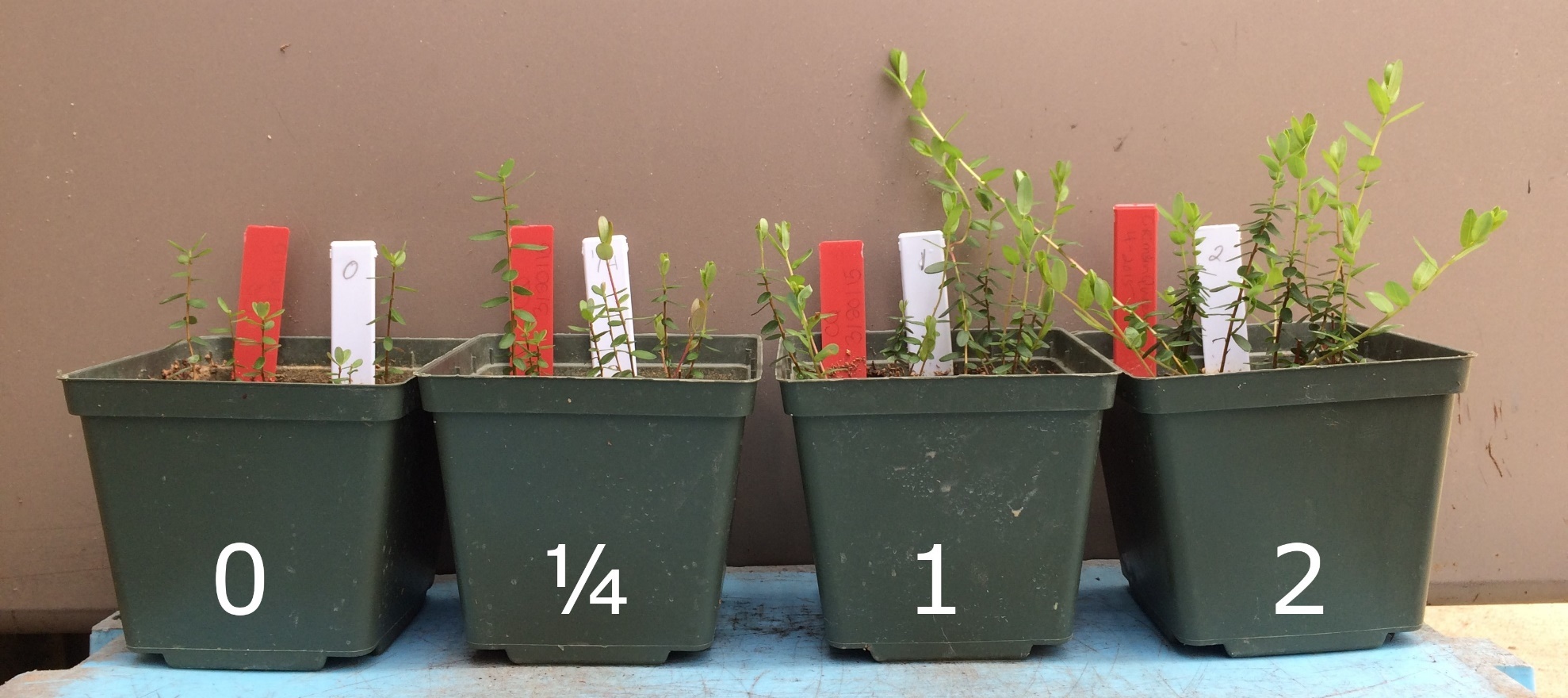
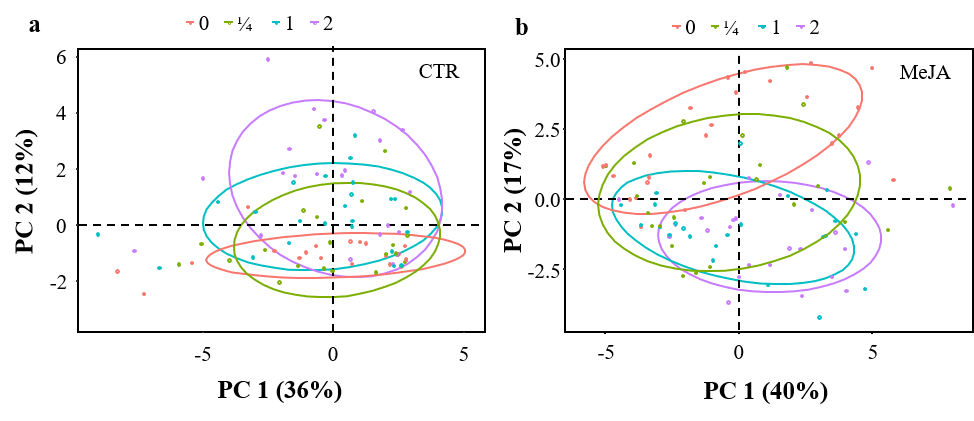
**Supplementary material**



**Supplementary Figure 1.** Cranberry plants, variety ‘Crimson Queen,’ exposed to four different fertilizer regimes.



**Supplementary Figure 2.** Principal component analysis (PCA) of cranberry volatile emissions in response to four fertilizer regimes. **(a)** Constitutive volatile emissions. **(b)** Induced volatile emissions. The PCA shows the first and second principal components (PC) with the explained variance in brackets. Ellipses indicate 68% confidence intervals. Not distinguished are the six cranberry varieties that were compared. Induction treatments: control (CTR) and methyl jasmonate (MeJA).

**Supplementary Table 1.** Results of MANOVA for the effects of fertilizer, induction, variety, their interactions on cranberry volatile emission.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Group** | **Fertilizer** | | | | **Induction** | | | | **Variety** | | | |
|  | Wilk's λ | F | df | P | Wilk's λ | F | df | P | Wilk's λ | F | df | P |
| GLVs | 0.87 | 2.18 | 3, 144 | **0.03** | 0.85 | 8.32 | 1, 144 | **< 0.001** | 0.72 | 3.30 | 5, 144 | **<0.001** |
| Monoterpenes | 0.70 | 2.51 | 3, 144 | **< 0.001** | 0.69 | 9.02 | 1, 144 | **< 0.001** | 0.53 | 2.73 | 5, 144 | **<0.001** |
| Sesquiterpenes | 0.59 | 3.88 | 3, 144 | **< 0.001** | 0.39 | 30.31 | 1, 144 | **< 0.001** | 0.60 | 2.12 | 5, 144 | **<0.001** |
| Aromatics | 0.93 | 1.17 | 3, 144 | 0.32 | 0.73 | 17.81 | 1, 144 | **< 0.001** | 0.70 | 3.60 | 5, 144 | **<0.001** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Group** | **Fertilizer × Induction** | | | | **Fertilizer × Variety** | | | | **Induction × Variety** | | | |
|  | Wilk's λ | F | df | P | Wilk's λ | F | df | P | Wilk's λ | F | df | P |
| GLVs | 0.97 | 0.49 | 3, 144 | 0.88 | 0.70 | 1.20 | 15, 144 | 0.18 | 0.89 | 1.15 | 5, 144 | 0.31 |
| Monoterpenes | 0.78 | 1.67 | 3, 144 | **0.03** | 0.54 | 0.85 | 15, 144 | 0.86 | 0.74 | 1.21 | 5, 144 | 0.19 |
| Sesquiterpenes | 0.74 | 2.12 | 3, 144 | **0.003** | 0.58 | 0.76 | 15, 144 | 0.96 | 0.64 | 1.89 | 5, 144 | **0.002** |
| Aromatics | 0.96 | 0.66 | 3, 144 | 0.75 | 0.85 | 0.54 | 15, 144 | 0.99 | 0.73 | 3.13 | 5, 144 | **< 0.001** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Group** | **Fertilizer × Induction × Variety** | | | |
|  | Wilk's λ | F | df | P |
| GLVs | 0.79 | 0.78 | 15, 144 | 0.85 |
| Monoterpenes | 0.60 | 0.70 | 15, 144 | 0.99 |
| Sesquiterpenes | 0.60 | 0.71 | 15, 144 | 0.99 |
| Aromatics | 0.83 | 0.61 | 15, 144 | 0.98 |

GLVs = green leaf volatiles.

**Supplementary Table 2.** Total volatiles per group emitted by cranberry plants in response to four different fertilizer regimes.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Group** | **0×** | | **¼×** | | **1×** | | **2×** | |
|  | **CTR** | **MeJA** | **CTR** | **MeJA** | **CTR** | **MeJA** | **CTR** | **MeJA** |
| GLVs | 12 ± 4.1 | 15 ± 3.3 | 10 ± 2.6 | 22 ± 6.2 | 17 ± 4.0 | 27 ± 5.2 | 30 ± 12.4 | 49 ± 11.1 |
| Monoterpenes | 32 ± 10.6 | 63 ± 14.8 | 29 ± 7.6 | 46 ± 11.1 | 32 ± 8.4 | 45 ± 8.4 | 28 ± 7.4 | 60 ± 11.2 |
| Sesquiterpenes | 3 ± 0.8 | 58 ± 20.6 | 5 ± 1.6 | 169 ± 34.9 | 13 ± 3.5 | 268 ± 49.3 | 21 ± 5.5 | 315 ± 49.3 |
| Aromatics | 9 ± 3.1 | 29 ± 8.1 | 9 ± 2.7 | 26 ± 6.9 | 11 ± 3.0 | 20 ± 5.3 | 7 ± 2.6 | 24 ± 3.9 |

Values represent means over all six varieties ± SE in ng/h. Fertilizer regimes: 0×, ¼×, 1×, and 2×. Induction treatments: control (CTR) and methyl jasmonate (MeJA). GLVs = green leaf volatiles.

**Supplementary Table 3.** Statistics corresponding to Supplementary Table 2.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Group** | **Pfertilizer** | **Pinduction** | **Pvariety** | **Pfertilizer × induction** | **Pfertilizer × variety** | **Pinduction × variety** | **Pfertilizer × induction × variety** |
| GLVs | **<0.001** | **0.02** | **0.001** | 0.68 | **0.01** | 0.99 | 0.96 |
| Monoterpenes | 0.75 | **0.003** | 0.12 | 0.76 | 0.87 | 0.98 | 0.99 |
| Sesquiterpenes | **<0.001** | **<0.001** | **<0.001** | **<0.001** | 0.22 | **<0.001** | 0.36 |
| Aromatics | NA | **<0.001** | **0.002** | NA | NA | 0.13 | NA |

GLVs = green leaf volatiles. NA = not applicable.

**Supplementary Table 4.** Individual volatiles emitted by cranberry plants in response to four different fertilizer regimes.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Compound** | **Group** | **0×** | | **¼×** | | **1×** | | **2×** | |
|  |  |  | **CTR** | **MeJA** | **CTR** | **MeJA** | **CTR** | **MeJA** | **CTR** | **MeJA** |
| 1 | (*Z*)-3-hexen-1-ol | GLVs | 4 ± 0.5 | 1 ± 0.5 | 3 ± 0.4 | 4 ± 0.6 | 6 ± 0.6 | 6 ± 0.6 | 14 ± 0.8 | 14 ± 0.8 |
| 2 | hexanol | GLVs | 1 ± 0.8 | 2 ± 0.7 | 1 ± 0.2 | 2 ± 0.4 | 2 ± 0.3 | 2 ± 0.2 | 2 ± 0.3 | 3 ± 0.2 |
| 3 | 2,5-hexanedione | Diketone | 7 ± 2.1 | 10 ± 2.1 | 7 ± 1.8 | 7 ± 1.9 | 8 ± 1.9 | 6 ± 1.6 | 6 ± 1.6 | 8 ± 1.7 |
| 4 | α-pinene | Monoterpenes | 9 ± 2.1 | 18 ± 3.7 | 8 ± 2.3 | 15 ± 3.1 | 12 ± 3.5 | 20 ± 2.8 | 9 ± 1.7 | 28 ± 4.1 |
| 5 | camphene | Monoterpenes | 1 ± 0.7 | 5 ± 2.8 | 2 ± 0.8 | 2 ± 0.9 | 1 ± 0.7 | 0 ± 0.1 | 0 ± 0.3 | 1 ± 0.4 |
| 6 | β-pinene | Monoterpenes | 3 ± 1.0 | 4 ± 1.1 | 4 ± 1.3 | 2 ± 0.8 | 4 ± 1.3 | 4 ± 1.5 | 6 ± 1.7 | 5 ± 1.8 |
| 7 | myrcene | Monoterpenes | 0 ± 0.0 | 1 ± 0.5 | 0 ± 0.0 | 1 ± 0.5 | 0 ± 0.2 | 2 ± 0.6 | 0 ± 0.2 | 3 ± 0.7 |
| 8 | (*Z*)-3-hexenyl acetate | GLVs | 7 ± 1.8 | 13 ± 2.8 | 7 ± 1.8 | 16 ± 4.4 | 10 ± 2.5 | 19 ± 3.4 | 14 ± 4.3 | 32 ± 7.9 |
| 9 | Eucalyptol/ limonene | Monoterpenes | 13 ± 7.4 | 16 ± 5.1 | 11 ± 5.5 | 17 ± 5.2 | 10 ± 2.8 | 15 ± 4.5 | 10 ± 4.0 | 19 ± 4.4 |
| 10 | linalool | Monoterpenes | 2 ± 1.6 | 12 ± 4.4 | 1 ± 0.5 | 6 ± 2.2 | 2 ± 1.4 | 3 ± 1.4 | 2 ± 1.5 | 4 ± 1.4 |
| 11 | nonanal | Aldehydes | 1 ± 0.6 | 1 ± 0.5 | 0 ± 0.1 | 2 ± 0.7 | 1 ± 0.4 | 2 ± 0.6 | 1 ± 0.4 | 3 ± 0.9 |
| 12 | (3*E*)-4,8-dimethylnona-1,3,7-triene | Homoterpenes | 0 ± 0.2 | 35 ± 6.0 | 2 ± 1.2 | 35 ± 5.8 | 4 ± 1.0 | 44 ± 7.4 | 7 ± 1.9 | 55 ± 9.2 |
| 13 | methyl salicylate | Aromatics | 1 ± 0.7 | 3 ± 1.1 | 2 ± 1.1 | 2 ± 1.0 | 3 ± 1.0 | 2 ± 0.9 | 3 ± 1.3 | 4 ± 1.0 |
| 14 | α-terpineol | Monoterpenes | 3 ± 1.0 | 6 ± 1.7 | 2 ± 0.6 | 2 ± 0.7 | 3 ± 1.0 | 0 ± 0.2 | 2 ± 1.1 | 1 ± 0.4 |
| 15 | unknown compound | Unknown | 1 ± 0.5 | 3 ± 0.9 | 1 ± 0.5 | 2 ± 0.8 | 0 ± 0.0 | 1 ± 0.4 | 1 ± 0.6 | 2 ± 0.9 |
| 16 | indole | Aromatics | 0 ± 0.0 | 16 ± 5.4 | 0 ± 0.2 | 13 ± 3.8 | 0 ± 0.0 | 13 ± 4.4 | 0 ± 0.3 | 12 ± 2.8 |
| 17 | phenylethyl ester | Aromatics | 7 ± 2.5 | 11 ± 2.9 | 6 ± 2.0 | 10 ± 3.1 | 8 ± 2.3 | 5 ± 1.5 | 4 ± 1.8 | 8 ± 2.3 |
| 18 | *n*-tridecane | Alkanes | 2 ± 1.0 | 2 ± 0.8 | 1 ± 0.4 | 2 ± 0.7 | 2 ± 0.7 | 1 ± 0.6 | 1 ± 0.7 | 1 ± 0.6 |
| 19 | α-cubebene | Sesquiterpenes | 2 ± 0.6 | 4 ± 1.1 | 2 ± 0.6 | 2 ± 0.9 | 2 ± 0.9 | 1 ± 0.4 | 0 ± 0.3 | 1 ± 0.6 |
| 20 | copaene | Sesquiterpenes | 1 ± 0.6 | 2 ± 0.8 | 1 ± 0.5 | 3 ± 1.0 | 0 ± 0.4 | 4 ± 1.1 | 1 ± 0.7 | 6 ± 1.1 |
| 21 | muurolene | Sesquiterpenes | 0 ± 0.0 | 0 ± 0.5 | 0 ± 0.0 | 2 ± 0.7 | 0 ± 0.0 | 3 ± 1.2 | 0 ± 0.0 | 4 ± 1.3 |
| 22 | caryophyllene | Sesquiterpenes | 0 ± 0.0 | 32 ± 11.7 | 2 ± 1.1 | 91 ± 18.2 | 8 ± 2.5 | 150 ± 25.8 | 14 ± 3.3 | 173 ± 25.9 |
| 23 | humulene | Sesquiterpenes | 0 ± 0.0 | 15 ± 5.7 | 1 ± 0.5 | 49 ± 10.3 | 2 ± 1.2 | 78 ± 14.6 | 5 ± 1.8 | 90 ± 14.5 |
| 24 | germacrene D | Sesquiterpenes | 0 ± 0.0 | 5 ± 2.6 | 0 ± 0.0 | 19 ± 4.3 | 0 ± 0.0 | 29 ± 5.9 | 0 ± 0.4 | 35 ± 5.9 |
| 25 | δ-cadinene | Sesquiterpenes | 0 ± 0.0 | 0 ± 0.0 | 0 ± 0.0 | 4 ± 1.2 | 0 ± 0.0 | 5 ± 1.5 | 0 ± 0.0 | 6 ± 1.3 |

Values represent means over all six varieties ± SE in ng/h. Fertilizer regimes: 0×, ¼×, 1×, and 2×. Induction treatments: control (CTR) and methyl jasmonate (MeJA).

**Supplementary Table 5.** Statistics corresponding to Supplementary Table 4.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Pfertilizer** | **Pinduction** | **Pvariety** | **Pfertilizer × induction** | **Pfertilizer × variety** | **Pinduction × variety** | **Pfertilizer × induction × variety** |
| 1 | **0.002** | 0.86 | **0.02** | 0.85 | 0.05 | 0.41 | 0.77 |
| 2 | 0.10 | 0.05 | 0.18 | 0.88 | 0.77 | 0.56 | 0.91 |
| 3 | 0.93 | 0.43 | 0.18 | 0.54 | 0.92 | 0.94 | 0.99 |
| 4 | 0.16 | **< 0.001** | **0.003** | 0.17 | 0.95 | 0.97 | 0.85 |
| 5 | 0.10 | 0.47 | 0.12 | 0.28 | 0.66 | 0.67 | 0.81 |
| 6 | 0.53 | 0.76 | 0.39 | 0.72 | 0.32 | 0.21 | 0.97 |
| 7 | **0.04** | **< 0.001** | **< 0.001** | 0.17 | 0.24 | **0.047** | 0.56 |
| 8 | **0.003** | **< 0.001** | **< 0.001** | 0.45 | **0.01** | 0.98 | 0.88 |
| 9 | 0.96 | 0.12 | **0.04** | 0.96 | 0.92 | 0.86 | 0.99 |
| 10 | 0.10 | **0.006** | 0.10 | 0.14 | 0.75 | 0.72 | 0.93 |
| 11 | 0.38 | **< 0.001** | **0.03** | 0.25 | 0.21 | 0.37 | 0.24 |
| 12 | **0.01** | **< 0.001** | **< 0.001** | 0.29 | 0.77 | **< 0.001** | 0.87 |
| 13 | NA | 0.36 | 0.47 | NA | NA | 0.49 | NA |
| 14 | **0.002** | 0.94 | 0.47 | 0.05 | 0.97 | 0.92 | 0.98 |
| 15 | 0.18 | **< 0.001** | **0.005** | 0.67 | 0.53 | **0.04** | 0.27 |
| 16 | NA | **< 0.001** | **< 0.001** | NA | NA | **< 0.001** | NA |
| 17 | NA | 0.28 | 0.09 | NA | NA | 0.95 | NA |
| 18 | 0.77 | 0.39 | 0.17 | 0.86 | 0.73 | 0.75 | 0.97 |
| 19 | 0.06 | 0.31 | 0.17 | 0.20 | 0.84 | 1.00 | 0.89 |
| 20 | 0.14 | **< 0.001** | 0.77 | 0.18 | 0.74 | 0.15 | 0.96 |
| 21 | **0.03** | **< 0.001** | **0.001** | **0.03** | 0.38 | **0.001** | 0.38 |
| 22 | **< 0.001** | **< 0.001** | **< 0.001** | **< 0.001** | 0.23 | **< 0.001** | 0.44 |
| 23 | **< 0.001** | **< 0.001** | **< 0.001** | **< 0.001** | 0.23 | **< 0.001** | 0.35 |
| 24 | **< 0.001** | **< 0.001** | **< 0.001** | **< 0.001** | 0.24 | **< 0.001** | 0.24 |
| 25 | **< 0.001** | **< 0.001** | **0.001** | **< 0.001** | 0.14 | **0.001** | 0.14 |

NA = not applicable.

**Supplementary Table 6.** Percentages of individual volatiles emitted by cranberry plants in response to four fertilizer regimes.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Compound** | **Group** | **0×** | | **¼×** | | **1×** | | **2×** | |
|  |  |  | **CTR** | **MeJA** | **CTR** | **MeJA** | **CTR** | **MeJA** | **CTR** | **MeJA** |
| 1 | (*Z*)-3-hexen-1-ol | GLVs | 3 ± 1.2 | 0 ± 0.1 | 7 ± 4.3 | 1 ± 0.4 | 6 ± 1.9 | 1 ± 0.3 | 10 ± 3.7 | 3 ± 0.6 |
| 2 | hexanol | GLVs | 2 ± 1.0 | 1 ± 0.3 | 0 ± 0.2 | 0 ± 0.2 | 1 ± 0.4 | 0 ± 0.2 | 1 ± 0.3 | 1 ± 0.2 |
| 3 | 2,5-hexanedione | Diketone | 9 ± 2.4 | 5 ± 1.0 | 10 ± 3.5 | 2 ± 0.6 | 7 ± 1.2 | 1 ± 0.4 | 5 ± 1.4 | 2 ± 0.3 |
| 4 | α-pinene | Monoterpenes | 15 ± 3.9 | 9 ± 1.5 | 15 ± 5.0 | 6 ± 1.1 | 15 ± 3.9 | 6 ± 0.7 | 13 ± 4.5 | 6 ± 0.6 |
| 5 | camphene | Monoterpenes | 7 ± 5.5 | 1 ± 0.6 | 8 ± 4.6 | 1 ± 0.3 | 8 ± 4.9 | 0 ± 0.0 | 2 ± 1.2 | 0 ± 0.1 |
| 6 | β-pinene | Monoterpenes | 7 ± 3.0 | 2 ± 0.8 | 8 ± 2.7 | 1 ± 0.4 | 4 ± 1.6 | 1 ± 0.3 | 4 ± 1.5 | 1 ± 0.3 |
| 7 | myrcene | Monoterpenes | 0 ± 0.0 | 0 ± 0.1 | 0 ± 0.0 | 0 ± 0.1 | 0 ± 0.1 | 0 ± 0.1 | 0 ± 0.1 | 0 ± 0.1 |
| 8 | (*Z*)-3-hexenyl acetate | GLVs | 10 ± 2.6 | 6 ± 1.1 | 8 ± 2.1 | 5 ± 1.1 | 9 ± 1.7 | 5 ± 1.0 | 11 ± 2.4 | 6 ± 1.0 |
| 9 | Eucalyptol/ limonene | Monoterpenes | 13 ± 5.0 | 6 ± 2.1 | 8 ± 3.2 | 4 ± 1.1 | 12 ± 4.5 | 3 ± 0.9 | 10 ± 3.2 | 3 ± 0.8 |
| 10 | linalool | Monoterpenes | 1 ± 0.7 | 4 ± 0.9 | 1 ± 0.4 | 1 ± 0.3 | 1 ± 0.5 | 0 ± 0.2 | 1 ± 0.6 | 0 ± 0.2 |
| 11 | nonanal | Aldehydes | 0 ± 0.3 | 0 ± 0.2 | 0 ± 0.1 | 1 ± 0.2 | 0 ± 0.1 | 0 ± 0.1 | 0 ± 0.2 | 1 ± 0.2 |
| 12 | (3*E*)-4,8-dimethylnona-1,3,7-triene | Homoterpenes | 0 ± 0.1 | 27 ± 5.4 | 6 ± 3.0 | 21 ± 4.7 | 7 ± 2.1 | 17 ± 4.2 | 6 ± 1.6 | 13 ± 1.9 |
| 13 | methyl salicylate | Aromatics | 6 ± 5.5 | 1 ± 0.3 | 2 ± 1.0 | 1 ± 0.5 | 2 ± 0.9 | 1 ± 0.2 | 2 ± 0.9 | 1 ± 0.3 |
| 14 | α-terpineol | Monoterpenes | 8 ± 3.2 | 3 ± 0.9 | 4 ± 1.5 | 1 ± 0.3 | 2 ± 0.6 | 0 ± 0.0 | 1 ± 0.7 | 0 ± 0.1 |
| 15 | unknown compound | Unknown | 1 ± 0.4 | 1 ± 0.3 | 1 ± 0.7 | 0 ± 0.2 | 0 ± 0.0 | 0 ± 0.1 | 0 ± 0.2 | 0 ± 0.1 |
| 16 | indole | Aromatics | 0 ± 0.0 | 7 ± 1.9 | 0 ± 0.1 | 4 ± 0.8 | 0 ± 0.0 | 2 ± 0.5 | 0 ± 0.4 | 2 ± 0.5 |
| 17 | phenylethyl ester | Aromatics | 8 ± 1.9 | 4 ± 0.9 | 6 ± 1.9 | 3 ± 1.2 | 6 ± 1.8 | 1 ± 0.4 | 6 ± 3.4 | 1 ± 0.4 |
| 18 | *n*-tridecane | Alkanes | 1 ± 0.5 | 1 ± 0.2 | 1 ± 0.3 | 0 ± 0.1 | 1 ± 0.4 | 0 ± 0.2 | 1 ± 0.3 | 0 ± 0.1 |
| 19 | α-cubebene | Sesquiterpenes | 2 ± 0.6 | 2 ± 0.5 | 3 ± 1.4 | 1 ± 0.3 | 1 ± 0.5 | 0 ± 0.2 | 0 ± 0.2 | 0 ± 0.1 |
| 20 | copaene | Sesquiterpenes | 7 ± 5.5 | 2 ± 1.3 | 1 ± 0.9 | 1 ± 0.4 | 0 ± 0.5 | 1 ± 0.2 | 1 ± 0.4 | 1 ± 0.2 |
| 21 | muurolene | Sesquiterpenes | 0 ± 0.0 | 0 ± 0.1 | 0 ± 0.0 | 0 ± 0.1 | 0 ± 0.0 | 0 ± 0.1 | 0 ± 0.0 | 1 ± 0.1 |
| 22 | caryophyllene | Sesquiterpenes | 0 ± 0.0 | 11 ± 2.8 | 9 ± 5.0 | 26 ± 3.4 | 15 ± 4.8 | 35 ± 2.6 | 19 ± 4.7 | 33 ± 1.8 |
| 23 | humulene | Sesquiterpenes | 0 ± 0.0 | 5 ± 1.3 | 1 ± 0.9 | 13 ± 1.9 | 2 ± 1.1 | 18 ± 1.6 | 6 ± 2.1 | 17 ± 1.1 |
| 24 | germacrene D | Sesquiterpenes | 0 ± 0.0 | 1 ± 0.5 | 0 ± 0.0 | 5 ± 0.8 | 0 ± 0.0 | 6 ± 0.7 | 0 ± 0.5 | 6 ± 0.5 |
| 25 | δ-cadinene | Sesquiterpenes | 0 ± 0.0 | 0 ± 0.0 | 0 ± 0.0 | 1 ± 0.2 | 0 ± 0.0 | 1 ± 0.2 | 0 ± 0.0 | 1 ± 0.2 |

Values represent means over all six varieties ± SE in %. Fertilizer regimes: 0×, ¼×, 1×, and 2×. Induction treatments: control (CTR) and methyl jasmonate (MeJA).

**Supplementary Table 7.** Statistics corresponding to Supplementary Table 6.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Pfertilizer** | **Pinduction** | **Pvariety** | **Pfertilizer × induction** | **Pfertilizer × variety** | **Pinduction × variety** | **Pfertilizer × induction × variety** |
| 1 | 0.19 | **<0.001** | **0.005** | 0.76 | 0.68 | **0.007** | 0.54 |
| 2 | 0.22 | 0.07 | 0.23 | 0.65 | 0.28 | **0.045** | 0.55 |
| 3 | 0.06 | **<0.001** | 0.18 | 0.49 | 0.36 | 0.08 | 0.32 |
| 4 | 0.82 | **<0.001** | **<0.001** | 0.99 | 0.27 | 0.06 | 0.27 |
| 5 | 0.72 | **0.02** | **0.002** | 0.73 | 0.95 | **0.002** | 0.92 |
| 6 | 0.28 | **<0.001** | 0.62 | 0.57 | 0.53 | 0.40 | 0.82 |
| 7 | 0.18 | **<0.001** | **0.01** | 0.60 | 0.93 | 0.38 | 0.91 |
| 8 | 0.60 | **<0.001** | **<0.001** | 0.94 | 0.14 | **0.01** | 0.84 |
| 9 | 0.60 | **0.001** | **0.009** | 0.85 | 0.68 | **0.02** | 1.00 |
| 10 | **0.003** | 0.32 | 0.10 | **0.045** | 0.55 | 0.99 | 0.99 |
| 11 | 0.72 | **0.04** | 0.05 | 0.55 | 0.16 | 0.44 | 0.83 |
| 12 | 0.51 | **<0.001** | **<0.001** | **0.01** | 0.29 | **0.003** | 0.89 |
| 13 | 0.56 | **0.02** | **0.003** | 0.50 | 0.23 | **0.03** | 0.12 |
| 14 | **<0.001** | **0.002** | 0.26 | 0.36 | 0.71 | 0.40 | 0.69 |
| 15 | **0.03** | 1.00 | **0.007** | 0.61 | **0.003** | 0.57 | **0.03** |
| 16 | **0.001** | **<0.001** | **<0.001** | **<0.001** | 0.54 | **<0.001** | 0.31 |
| 17 | 0.46 | **<0.001** | 0.37 | 0.88 | 0.62 | 0.92 | 0.54 |
| 18 | 0.61 | 0.08 | 0.42 | 0.82 | 0.75 | 0.38 | 0.99 |
| 19 | **0.04** | 0.07 | 0.28 | 0.47 | 0.81 | 0.71 | 0.61 |
| 20 | 0.30 | 0.47 | 0.28 | 0.58 | 0.33 | 0.65 | 0.99 |
| 21 | 0.07 | **<0.001** | **0.01** | 0.07 | 0.97 | **0.01** | 0.97 |
| 22 | **<0.001** | **<0.001** | **<0.001** | 0.69 | 0.33 | 0.07 | 0.75 |
| 23 | **<0.001** | **<0.001** | **<0.001** | **0.002** | 0.33 | 0.07 | 0.38 |
| 24 | **<0.001** | **<0.001** | **<0.001** | **<0.001** | 0.61 | **<0.001** | 0.69 |
| 25 | **0.004** | **<0.001** | **0.03** | **0.004** | 0.92 | **0.03** | 0.92 |