**Table S1.** Composition of the cuticular hydrocarbons (CHCs) of the 14 genetic lines of *Altica*. Relative peak areas (% total peak area), mean ± SD. “tr”, trace; “\”, not detected in all of them. *Altica fragariae* (AF), *A. viridicyanea* (AV), F1 hybrids (AV♀×AF♂), F2 hybrids (F1♀×F1♂), backcross BC1 (AV♀×F1♂), backcross BC2 (AF♀×F1♂), and backcross BC3 (F1♀×AF♂).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | R.I. | Hydrocarbon | females | | | | | | | males | | | | | | |
|  |  |  | AV-♀ | BC1-♀ | BC2-♀ | BC3-♀ | F1-♀ | F2-♀ | AF-♀ | AV-♂ | BC1-♂ | BC2-♂ | BC3-♂ | F1-♂ | F2-♂ | AF-♂ |
| **1** | 2734 | 11-methyl-heptacosane | tr | tr | 0.97±0.77 | 1.45±1.24 | 0.73±0.70 | 1.04±0.91 | 1.23±0.49 | 0.17±0.07 | 0.38±0.44 | 0.80±0.25 | 2.06±1.85 | 1.29±0.97 | 1.81±1.96 | 1.54±0.58 |
| **2** | 2737 | unknown | tr | 0.17±0.22 | 1.16±0.46 | 0.98±0.49 | 0.75±0.35 | 0.71±0.58 | 1.17±0.25 | \ | 0.27±0.24 | 0.92±0.25 | 1.13±0.42 | 0.60±0.30 | 0.77±0.68 | 2.23±0.66 |
| **3** | 2740 | 7-methyl-heptacosane | 0.06±0.10 | 0.20±0.20 | 0.91±0.29 | 0.86±0.29 | 0.81±0.31 | 0.67±0.46 | 1.16±0.17 | 0.12±0.04 | 0.26±0.26 | 0.91±0.19 | 1.02±0.18 | 0.66±0.18 | 0.68±0.39 | 1.01±0.50 |
| **4** | 2835 | 13-methyl-octacosane | 0.10±0.11 | 0.31±0.32 | 1.38±0.76 | 1.52±2.45 | 0.83±0.31 | 0.98±0.71 | 0.77±0.20 | 0.19±0.08 | 0.40±0.23 | 1.04±0.37 | 1.50±0.51 | 0.86±0.36 | 0.84±0.60 | 1.03±0.44 |
| **5** | 2863 | 2-methyl-octacosane | 1.40±0.46 | 3.73±2.79 | 7.22±1.22 | 8.43±2.04 | 6.39±1.92 | 6.21±3.31 | 11.29±1.29 | 1.59±0.36 | 5.72±4.24 | 8.96±1.36 | 8.89±1.69 | 6.88±1.34 | 7.32±4.06 | 11.33±2.59 |
| **6** | 2900 | n-nonacosane | \ | 0.24±0.33 | 1.44±0.76 | 1.55±0.77 | 1.03±0.58 | 1.27±1.03 | 1.44±0.24 | \ | 0.22±0.18 | 1.61±0.59 | 1.75±0.80 | 0.87±0.45 | 1.33±1.09 | 1.49±0.31 |
| **7** | 2926 | 13-methyl-nonacosane | 1.92±0.53 | 6.00±3.79 | 12.12±1.36 | 13.97±2.27 | 12.37±2.31 | 10.03±4.31 | 18.42±1.02 | 2.68±0.50 | 8.79±4.68 | 15.92±1.16 | 15.42±2.49 | 12.84±1.76 | 11.94±4.00 | 17.76±2.88 |
| **8** | 2938 | 9-methyl-nonacosane | 5.68±1.38 | 6.98±2.36 | 11.10±2.00 | 12.87±1.93 | 11.83±1.41 | 10.10±2.25 | 15.92±1.21 | 9.05±0.83 | 9.29±2.84 | 14.22±1.61 | 12.96±1.66 | 12.22±1.18 | 11.48±1.96 | 13.15±1.80 |
| **9** | 2941 | 7-methyl-nonacosane | 0.50±0.22 | 1.35±0.91 | 3.03±0.86 | 2.94±0.65 | 2.08±0.55 | 2.05±1.08 | 3.26±0.48 | 0.77±0.19 | 1.22±1.01 | 3.64±1.17 | 2.85±0.99 | 3.38±0.64 | 2.43±1.13 | 3.96±0.83 |
| **10** | 2958 | ?,?-dimethyl-nonacosane | 4.94±1.28 | 5.24±1.40 | 3.87±0.79 | 4.30±1.01 | 5.65±1.38 | 5.32±1.48 | 4.46±0.51 | 7.57±1.36 | 6.49±1.57 | 4.73±0.92 | 4.79±1.17 | 6.02±0.96 | 5.72±1.85 | 4.08±1.03 |
| **11** | 2975 | ?,?-dimethyl-nonacosane | 1.58±0.45 | 5.40±4.48 | 13.93±1.97 | 14.98±3.32 | 12.02±1.72 | 11.00±6.03 | 16.24±1.93 | 1.94±0.32 | 6.21±3.99 | 16.36±2.03 | 15.63±2.28 | 15.23±1.83 | 12.02±6.21 | 15.11±2.15 |
| **12** | 2981 | 5,15-dimethyl-nonacosane | \ | 0.66±0.61 | 1.91±0.70 | 2.19±0.57 | 1.13±0.31 | 1.42±0.95 | 2.39±0.18 | \ | 0.43±0.71 | 2.37±0.39 | 2.30±0.57 | 1.83±0.21 | 1.65±1.05 | 2.52±0.64 |
| **13** | 3032 | 12-methyl-triacontane | 1.33±0.29 | 1.71±0.64 | 2.92±0.92 | 2.51±0.38 | 2.99±0.75 | 2.28±0.65 | 2.64±0.34 | 1.71±0.34 | 1.53±0.40 | 2.64±0.24 | 2.62±0.44 | 2.48±0.52 | 2.08±0.65 | 3.18±0.91 |
| **14** | 3035 | 10-methyl-triacontane | 1.26±0.42 | 1.88±0.66 | 2.61±0.75 | 2.62±1.35 | 2.03±0.49 | 2.26±0.89 | 1.53±0.20 | 1.42±0.32 | 1.98±0.49 | 2.43±0.58 | 3.18±1.41 | 1.35±0.41 | 1.92±0.60 | 2.94±1.10 |
| **15** | 3062 | 2-methyl-triacontane | 2.95±0.55 | 3.13±0.64 | 3.29±0.45 | 2.62±1.13 | 2.97±0.51 | 3.09±0.90 | 1.59±0.14 | 3.07±0.35 | 2.89±0.83 | 2.44±0.33 | 2.49±0.85 | 2.04±0.26 | 2.34±0.87 | 2.31±0.60 |
| **16** | 3100 | n-hentriacontane | 13.4±2.33 | 9.15±1.52 | 6.43±1.86 | 4.63±1.19 | 8.61±1.98 | 7.33±2.50 | 3.63±0.32 | 15.23±2.92 | 8.29±1.40 | 4.42±0.50 | 4.03±1.29 | 6.54±1.04 | 6.08±2.62 | 3.48±0.35 |
| **17** | 3132 | 11-methyl-hentriacontane | 16.88±1.61 | 11.09±3.03 | 4.74±0.60 | 3.80±1.62 | 6.31±0.76 | 7.80±4.30 | 2.24±0.23 | 15.52±1.39 | 10.53±3.10 | 3.01±0.56 | 2.94±1.86 | 5.47±0.57 | 6.07±4.23 | 2.25±0.57 |
| **18** | 3160 | 2-methyl-hentriacontane | 13.35±0.99 | 10.98±3.26 | 4.97±1.16 | 3.92±1.86 | 6.03±1.26 | 7.36±3.99 | 2.01±0.35 | 11.51±0.97 | 10.43±3.63 | 2.78±0.84 | 3.27±1.37 | 6.31±0.83 | 6.01±4.22 | 1.86±0.69 |
| **19** | 3161 | unknown | \ | 0.21±0.43 | 1.63±0.63 | 1.97±1.09 | 0.52±0.63 | 0.55±0.72 | 2.07±0.76 | \ | 0.05±0.18 | 1.55±0.74 | 1.75±0.50 | 0.18±0.55 | 0.71±0.67 | 1.67±0.51 |
| **20** | 3172 | ?,?-dimethyl-hentriacontane | 24.05±3.15 | 21.14±6.02 | 10.11±2.05 | 8.61±1.75 | 10.49±2.02 | 12.98±6.41 | 5.26±0.68 | 19.02±2.16 | 18.06±6.30 | 7.41±0.92 | 7.16±2.13 | 9.96±1.48 | 11.96±5.83 | 5.31±1.44 |
| **21** | 3230 | 16-methyl-dotriacontane | \ | 0.61±0.48 | 0.44±0.45 | 0.24±0.17 | 0.13±0.12 | 0.26±0.26 | 0.10±0.04 | tr | 0.22±0.14 | 0.10±0.06 | 0.14±0.06 | 0.10±0.04 | 0.25±0.28 | 0.13±0.09 |
| **22** | 3233 | 14-methyl-dotriacontane | 0.29±0.17 | 0.38±0.39 | 0.52±0.25 | 0.58±0.27 | 0.20±0.16 | 0.30±0.30 | 0.37±0.10 | \ | 0.14±0.15 | 0.38±0.20 | 0.37±0.13 | 0.13±0.05 | 0.23±0.23 | 0.61±0.59 |
| **23** | 3240 | ?-methyl-dotriacontane | 0.62±0.16 | 0.67±0.44 | 0.27±0.07 | 0.24±0.17 | 0.22±0.07 | 0.49±0.32 | 0.07±0.03 | 0.66±0.21 | 0.52±0.39 | 0.10±0.02 | 0.18±0.11 | 0.14±0.07 | 0.25±0.20 | 0.14±0.09 |
| **24** | 3260 | 2-methyl-dotriacontane | 0.69±0.16 | 0.73±0.31 | 0.41±0.06 | 0.31±0.15 | 0.40±0.08 | 0.52±0.26 | 0.11±0.05 | 0.58±0.13 | 0.57±0.34 | 0.17±0.04 | 0.25±0.12 | 0.26±0.05 | 0.32±0.19 | 0.16±0.04 |
| **25** | 3274 | ?,?-dimethyl-dotriacontane | 1.95±0.42 | 1.91±0.67 | 0.76±0.21 | 0.49±0.20 | 1.03±0.34 | 1.13±0.66 | 0.17±0.04 | 1.45±0.24 | 1.31±0.58 | 0.32±0.06 | 0.31±0.16 | 0.55±0.09 | 0.72±0.45 | 0.18±0.06 |
| **26** | 3282 | ?,?-dimethyl-dotriacontane | 0.59±0.20 | 0.63±0.24 | 0.24±0.12 | 0.14±0.13 | 0.42±0.16 | 0.23±0.23 | tr | 0.62±0.13 | 0.36±0.13 | 0.08±0.05 | 0.10±0.11 | 0.22±0.07 | 0.13±0.09 | tr |
| **27** | 3298 | 2,14/2,16-dimethyl-  dotriacontane | 1.67±0.56 | 1.29±0.67 | 0.30±0.15 | 0.19±0.22 | 0.39±0.10 | 0.51±0.45 | tr | 0.97±0.23 | 1.04±0.60 | 0.09±0.06 | 0.17±0.10 | 0.33±0.07 | 0.38±0.35 | tr |
| **28** | 3332 | 11/13/15- methyl-  tritriacontane | 4.72±1.51 | 4.16±1.46 | 1.33±0.30 | 1.09±0.38 | 1.65±0.29 | 2.11±1.21 | 0.40±0.07 | 4.11±0.63 | 2.41±1.09 | 0.61±0.11 | 0.710.34 | 1.25±0.15 | 2.58±4.48 | 0.51±0.15 |