**Tab. S3**: Cuticular hydrocarbons (CHCs) identified in male *Nasonia* profiles and the corresponding QTL from crosses between *Nasonia longicornis* and *Nasonia vitripennis* as well as between *N. longicornis* and *N. girauli*. Indicated are the retention indices (RI), compound identifications or possible configurations in case of ambiguities, chromosome number (Chr.), QTL position (pos.), confidence interval for the respective QTL position, hybrid cross (LV or LG), ratios of the CHC compounds in parental males of the two species for each respective cross (percentages with standard deviations) and significance assessments comparing the two ratios (Benjamini Hochberg-corrected Mann-Whitney U tests).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RI | Compound identification / possible configurations | Chr. | QTL pos. | Confidence interval | Cross | NL ♂ ratio | NV ♂ ratio | NG ♂ ratio | Significance |
| 2900 | C29 | 4 | 47.6 | 37.6 - 57.6 | LV | 1.11 ± 0.44 | 0.98 ± 0.5 |  | n.s. |
| 2934 | 9-; 11-; 13-; 15-MeC29 | 4 | 56.8 | 46.8 - 66.8 | LV | 0.13 ± 0.21 | 0.08 ± 0.12 |  | n.s. |
|  |  | 5 | 64.2 | 54.2 - 73 | LG | 0.13 ± 0.21 |  | 0.01 ± 0.05 | 0.02346 |
| 2942 | 7-MeC29 | 4 | 60 | 50 - 70 | LV | 0.78 ± 0.69 | 0.6 ± 0.31 |  | n.s. |
| 2951 | 5-MeC29 | 4 | 57.9 | 47.9 - 67.9 | LV | 0.36 ± 0.28 | 0.37 ± 0.16 |  | n.s. |
| 2973 | 3-MeC29 | 2 | 49.6 | 39.6 - 59.6 | LV | 0.15 ± 0.19 | 0.11 ± 0.06 |  | n.s. |
|  |  | 4 | 57.9 | 47.9 - 67.9 | LV |  |  |  |  |
|  |  | 5 | 63.3 | 53.3 - 73 | LG | 0.15 ± 0.20 |  | 0.04 ± 0.07 | n.s. |
| 2982 | 15,17-DiMeC29 | 2 | 71.5 | 61.5 - 81.5 | LG | 0.09 ± 0.1 |  | 0.01 ± 0.03 | n.s. |
| 3100 | C31 | 1 | 0 | 0 - 10 | LV |  |  |  |  |
|  |  | 1 | 48.9 | 38.9 - 58.9 | LV |  |  |  |  |
|  |  | 2 | 49.6 | 39.6 - 59.6 | LV |  |  |  |  |
|  |  | 3 | 77.9 | 67.9 - 87.9 | LV |  |  |  |  |
| 3131 | 9-; 11-; 13-; 15-MeC31 | 2 | 61.2 | 51.2 - 71.2 | LV | 2.13 ± 0.89 | 1.99 ± 0.95 |  | n.s. |
| 3141 | 7-MeC31 | 1 | 13.3 | 3.3 - 23.3 | LV | 22.71 ± 4.49 | 11.43 ± 1.11 |  | < 0.0001 |
|  |  | 2 | 0.7 | 0 - 10.7 | LV |  |  |  |  |
|  |  | 2 | 54.3 | 44.3 - 64.3 | LV |  |  |  |  |
|  |  | 3 | 60.2 | 50.2 - 70.2 | LV |  |  |  |  |
| 3149 | 5-MeC31 | 2 | 53.3 | 43.3 - 63.3 | LV | 7.17 ± 1.8 | 4.42 ± 0.65 |  | 0.00021 |
|  |  | 5 | 42 | 32 - 52 | LV |  |  |  |  |
| 3158 | 11,15-; 11,17-; 11,21-DiMeC31 | 2 | 69.4 | 59.4 - 79.4 | LV | 0.37 ± 0.12 | 0.46 ± 0.13 |  | n.s. |
|  |  | 3 | 50.3 | 40.3 - 60.3 | LV |  |  |  |  |
| 3171 | 7,11-DiMeC31 | 2 | 86.9 | 76.9 - 86.9 | LV | 4.84 ± 1.06 | 3.73 ± 0.35 |  | 0.01025 |
| 3177 | 3-MeC31 (+7,23-DiMeC31) | 2 | 46 | 36 - 56 | LV | 3.42 ± 0.73 | 2.55 ± 0.55 |  | n.s. |
|  |  | 5 | 49.8 | 39.8 - 59.8 | LV |  |  |  |  |
| 3187 | 7,25-DiMeC31 | 2 | 44.9 | 34.9 - 54.9 | LV | 0.93 ± 0.2 | 0.61 ± 0.18 |  | 0.00655 |
|  |  | 3 | 0 | 0 - 10 | LV |  |  |  |  |
|  |  | 5 | 45.9 | 35.9 - 55.9 | LV |  |  |  |  |
| 3226 | 3,7,9-; 3,7,11-; 3,7,15-TriMeC31 | 1 | 57.7 | 47.7 - 67.7 | LV | 0.23 ± 0.09 | 0.16 ± 0.08 |  | n.s. |
|  |  | 2 | 71.5 | 61.5 - 81.5 | LV |  |  |  |  |
| 3234 | 6-MeC32 | 1 | 63 | 53 - 73 | LV | 0.47 ± 0.14 | 0.39 ± 0.05 |  | n.s. |
| 3261 | 3,7,11,15-TetraMeC31 | 1 | 60.8 | 50.8 - 70.8 | LV | 0.53 ± 0.35 | 0.33 ± 0.1 |  | n.s. |
|  |  | 5 | 59.4 | 49.4 - 69.4 | LG | 0.53 ± 0.35 |  | 0.67 ± 0.18 | n.s. |
| 3273 | 9-C33ene | 2 | 46 | 36 - 56 | LV | 0.31 ± 0.18 | 1.45 ± 0.27 |  | < 0.0001 |
|  |  | 2 | 82.9 | 72.9 - 86.9 | LV |  |  |  |  |
|  |  | 3 | 29.2 | 19.2 - 39.2 | LV |  |  |  |  |
| 3281 | 7-C33ene | 1 | 44.5 | 34.5 - 54.5 | LV | 0.17 ± 0.09 | 0.96 ± 0.2 |  | < 0.0001 |
|  |  | 3 | 39.5 | 29.5 - 49.5 | LV |  |  |  |  |
| 3300 | C33 | 1 | 48 | 38 - 58 | LV | 0.41 ± 0.2 | 0.99 ± 0.25 |  | < 0.0001 |
|  |  | 5 | 49.8 | 39.8 - 59.8 | LV |  |  |  |  |
| 3330 | 9-; 11-; 13-; 15-MeC33 | 2 | 72.5 | 62.5 - 82.5 | LV | 4.98 ± 1.11 | 3.97 ± 1.26 |  | n.s. |
|  |  | 3 | 61.1 | 51.1 - 71.1 | LV |  |  |  |  |
|  |  | 3 | 33.2 | 23.2 - 43.2 | LG | 4.98 ± 1.11 |  | 8.02 ± 0.92 | 0.00044 |
|  |  | 4 | 55.5 | 45.5 - 65.5 | LG |  |  |  |  |
|  |  | 5 | 52.7 | 42.7 - 62.7 | LG |  |  |  |  |
| 3339 | 7-MeC33 | 5 | 48.8 | 38.8 - 58.8 | LV | 3.07 ± 1.03 | 2.93 ± 0.68 |  | n.s. |
| 3355 | 11,15-; 11,23- 11,25-DiMeC33 | 2 | 72.5 | 62.5 - 82.5 | LV | 1.97 ± 0.87 | 0.66 ± 0.42 |  | 0.00059 |
|  |  | 5 | 45.9 | 35.9 - 55.9 | LV |  |  |  |  |
|  |  | 4 | 55.5 | 45.5 - 65.5 | LG |  |  |  |  |
| 3360 | 7,19-; 7,21-DiMeC33 | 1 | 59.8 | 49.8 - 69.8 | LV | 1.23 ± 0.36 | 1.68 ± 0.56 |  | n.s. |
|  |  | 5 | 43.8 | 33.8 - 53.8 | LV |  |  |  |  |
|  |  | 4 | 55.5 | 45.5 - 65.5 | LG | 1.23 ± 0.36 |  | 1.24 ± 0.21 | n.s. |
| 3370 | 7,23-DiMeC33 | 2 | 56.3 | 46.3 - 66.3 | LV | 7.52 ± 1.63 | 7.71 ± 1.21 |  | n.s. |
|  |  | 2 | 86.9 | 76.9 - 86.9 | LV |  |  |  |  |
|  |  | 5 | 45 | 35 - 55 | LV |  |  |  |  |
| 3376 | 5,9-; 5,15-; 5,17-; 5,19-DiMeC33 (+11,15,23-TriMeC33) | 2 | 54.3 | 44.3 - 64.3 | LV | 4.4 ± 1.22 | 5.85 ± 0.81 |  | 0.01573 |
|  |  | 3 | 63.8 | 53.8 - 73.8 | LV |  |  |  |  |
| 3396 | 3,9-; 3,15-; 3,17-DiMeC33 | 2 | 49.3 | 39.3 - 59.3 | LV | 0.78 ± 0.64 | 1.09 ± 0.23 |  | n.s. |
| 3405 | 5,9,11-; 5,9,15-TriMeC33 | 1 | 2 | 0 - 12 | LV | 0.04 ± 0.1 | 2.04 ± 0.68 |  | < 0.0001 |
|  |  | 2 | 74.6 | 64.6 - 84.6 | LV |  |  |  |  |
|  |  | 3 | 69.4 | 59.4 - 79.4 | LV |  |  |  |  |
|  |  | 5 | 50.7 | 40.7 - 60.7 | LV |  |  |  |  |
| 3430 | 8,10-; 8,12-; 8,14-; 8,16-; 8,18-DiMeC34 | 1 | 5.1 | 0 - 15.1 | LV | 0.32 ± 0.14 | 0.92 ± 0.28 |  | < 0.0001 |
|  |  | 2 | 72.5 | 62.5 - 82.5 | LV |  |  |  |  |
|  |  | 5 | 43.8 | 33.8 - 53.8 | LV |  |  |  |  |
| 3453 | 3,7,11,15-TetraMeC33 | 2 | 75.7 | 65.7 - 85.7 | LV | 0.89 ± 0.4 | 1.57 ± 0.35 |  | 0.00211 |
|  |  | 5 | 58.4 | 48.4 - 68.4 | LG | 0.89 ± 0.4 |  | 4 ± 0.71 | 0.00011 |
| 3477 | 7,11-; 7,13-; 7,15-DiMeC34 | 2 | 56.3 | 46.3 - 66.3 | LV | 0.32 ± 0.19 | 0.41 ± 0.17 |  | n.s. |
| 3524 | 13-; 15-;17-MeC35 | 2 | 81.9 | 71.9 - 86.9 | LV | 1.65 ± 0.51 | 2.58 ± 0.44 |  | 0.00086 |
|  |  | 5 | 0 | 0 - 10 | LV |  |  |  |  |
| 3534 | 7-MeC35 | 2 | 81.9 | 71.9 - 86.9 | LV | 0.36 ± 0.1 | 0.77 ± 0.18 |  | < 0.0001 |
|  |  | 5 | 49.8 | 39.8 - 59.8 | LV |  |  |  |  |
| 3549 | 11,17-; 11,19-; 11,21-; 11,23-; 13,17-; 13,19-; 13,21-; 13,17-; 13,19-; 13,21-;13,23-; 15,17-; 15,19-; 15,21-; 15,23-DiMeC35 | 1 | 60.8 | 50.8 - 70.8 | LV | 4.35 ± 0.85 | 3.08 ± 0.92 |  | 0.02070 |
|  |  | 5 | 43.8 | 33.8 - 53.8 | LV |  |  |  |  |
| 3563 | 7,19-; 7,21-; 7,23-DiMeC35 | 1 | 51.5 | 41.5 - 61.5 | LV | 2.33 ± 0.68 | 7.07 ± 1.47 |  | < 0.0001 |
|  |  | 2 | 77.7 | 67.7 - 86.9 | LV |  |  |  |  |
|  |  | 5 | 43.8 | 33.8 - 53.8 | LV |  |  |  |  |
| 3572 | 5,15-; 5,17-; 5,19-; 5,21-; 5,23-DiMeC35 | 2 | 4.7 | 0 - 14.7 | LV | 2.84 ± 0.58 | 5.21 ± 0.73 |  | < 0.0001 |
|  |  | 2 | 58.2 | 48.2 - 68.2 | LV |  |  |  |  |
| 3585 | 7,15,21-; 7,15,23-; 7,17,21-; 7,17,23-; 7,19,21-; 7,19,23-TriMeC35 | 2 | 71.5 | 61.5 - 81.5 | LV | 0.71 ± 0.34 | 1.04 ± 0.29 |  | n.s. |
|  |  | 3 | 54.8 | 44.8 - 64.8 | LV |  |  |  |  |
| 3603 | 5,9,13-; 5,9,15-; 5,9,17-; 5,9,19-; 5,9,21-; 5,11,13-; 5,11,15-; 5,11,17-; 5,11,19-; 5,11,21-TriMeC35 | 2 | 58.2 | 48.2 - 68.2 | LV | 0.42 ± 0.3 | 1.65 ± 0.4 |  | < 0.0001 |
| 3721 | 13-; 15-; 17-; 19-MeC37 | 2 | 79.8 | 69.8 - 86.9 | LV |  |  |  |  |
| 3745 | 11,19-; 11,21-; 11,23-; 11,25-; 13,19-; 13,21-; 13,23-; 15,19-; 15,21-; 15,23-DiMeC37 | 2 | 86.9 | 76.9 - 86.9 | LV | 1.48 ± 0.4 | 1.38 ± 0.46 |  | n.s. |
|  |  | 5 | 43.8 | 33.8 - 53.8 | LV |  |  |  |  |
| 3764 | 7,19-; 7,21-; 7,23-DiMeC37 | 1 | 60.8 | 50.8 - 70.8 | LV | 0.58 ± 0.27 | 2.39 ± 0.69 |  | < 0.0001 |
|  |  | 2 | 79.8 | 69.8 - 86.9 | LV |  |  |  |  |
|  |  | 5 | 43.8 | 33.8 - 53.8 | LV |  |  |  |  |
|  |  | 2 | 82.9 | 72.9 - 86.9 | LG | 0.58 ± 0.27 |  | 0.61 ± 0.16 | n.s. |
| 3768 | 5,15-; 5,17-; 5,23-DiMeC37 | 2 | 69.4 | 59.4 - 79.4 | LV | 1.03 ± 0.46 | 1.42 ± 0.35 |  | n.s. |
| 3779 | 7,15,17-; 7,15,19-; 7,15,23-; 7,19,17-; 7,19,19-; 7,19,23-TriMeC37 | 2 | 76.7 | 66.7 - 86.7 | LV | 0.12 ± 0.14 | 0.53 ± 0.36 |  | 0.00336 |