**Additional file S5.** Top-five mass peak list per mosquito speciesusing thoraxes.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Average peak intensity (a.u.)\* | | | | | | | | | | |
| **MS peak number§** | **m/z (Da)** | ***Cx. declarator*** | ***Cx. dunni*** | ***Cx. eastor*** | ***Cx. idottus*** | ***Cx. nigripalpus*** | ***Cx. pedroi*** | ***Cx. portesi*** | ***Cx. quinquefasciatus*** | ***Cx. rabanicolus*** | ***Cx. spissipes*** | ***Cx. usquatus*** |
| 1 | 3148.3 | 8.72 | 2.86 | **18** | **19.9** | 8.66 | 4.16 | 3 | 13.74 | **14.63** | **18.9** | 12.27 |
| 2 | 3196.38 | 2.33 | 3.97 | 2.15 | 1.65 | 3 | 2.71 | **15.75** | 3.77 | 2.31 | 2.01 | 2.38 |
| 3 | 4081.85 | 3.78 | 9.38 | 6.8 | 11.28 | **20.72** | 11.36 | 9.14 | **24.57** | 10 | 7.63 | **18.51** |
| 4 | 4307.06 | 4.7 | 2.45 | 3.13 | 1.82 | 13.33 | 11.71 | **16.98** | 2.12 | 1.76 | 1.59 | 16.15 |
| 5 | 4324.51 | **18.26** | 1.87 | 2.28 | 2.54 | 7.36 | 4.01 | 5.59 | 19.77 | 4.31 | 2.2 | 7.5 |
| 6 | 4351.68 | 6.23 | 14.31 | 14.71 | **17.19** | 3.85 | 4.44 | 4.3 | 5.7 | 12.42 | 13.92 | 4.68 |
| 7 | 5127.88 | 4.19 | **17.67** | 3.61 | 2.83 | **4.28** | 4.21 | 2.18 | 8.94 | 2.85 | 2.72 | 1.76 |
| 8 | 5206.16# | **34.32** | 2.08 | 1.32 | 1.68 | 32.02 | **14.22** | 15.05 | **44.38** | 2.19 | 1.99 | **36.63** |
| 9 | 5335.07 | 3.98 | 1.36 | 2.73 | 2.61 | 4.22 | **15.1** | 3.09 | 4.36 | 3.19 | 1.86 | 3.58 |
| 10 | 5405.68# | 1.27 | **21.72** | **31.97** | **25.05** | 1.38 | 1.48 | **18.89** | 1.5 | **22.66** | 2.28 | 1.59 |
| 11 | 5450.25 | 1.2 | 3.28 | 2.9 | 3.65 | 1.28 | 2 | 2.63 | 1.23 | 3.35 | **18.01** | 1.35 |
| 12 | 6085.39 | 15.15 | 2.68 | 17.39 | 14.94 | 12.87 | 5.52 | 3.29 | **20.55** | 12.6 | 6.92 | 14.79 |
| 13 | 6124.41 | 4.13 | 12.1 | 3.96 | 4.06 | 3.76 | **16.12** | 10.48 | 5.69 | 3.62 | 14.62 | 4.59 |
| 14 | 6299.52 | 16.22 | 5.9 | **31.93** | **33.92** | **15.31** | 4.78 | 3.93 | **23.54** | **25.93** | **37.42** | **21.75** |
| 15 | 6357.55 | 2.6 | **33.13** | 3.27 | 3.82 | 2.57 | 1.76 | 3.65 | 3.09 | 3.63 | 4.49 | 2.98 |
| 16 | 6396.18 | 1.94 | 4.79 | 2.25 | 1.81 | 1.76 | 3.3 | **24.36** | 2.24 | 2.12 | 2.96 | 2.63 |
| 17 | 6426.43# | 1.83 | 3.87 | 4.1 | 1.74 | 1.38 | **17.89** | 6.28 | 4.66 | 2.4 | 2.05 | 3.59 |
| 18 | 8056.24 | 5.28 | 3.86 | 3.04 | 3 | 2.08 | 2.59 | 4.81 | 1.59 | 2.24 | **20.2** | 2.37 |
| 19 | 8076.8 | **19.73** | 2.76 | 3.85 | 3.96 | 2.1 | 2.22 | 10.32 | 2.07 | 2.83 | 6.03 | 2.27 |
| 20 | 8163.7 | 5.1 | 12.45 | 10.25 | 15.04 | **35.07** | **17.35** | 8.8 | **31.34** | **14.09** | 8.32 | **25.88** |
| 21 | 8204.74 | **20.82** | 4.45 | 2.92 | 3.57 | 5.47 | 3.11 | 11.62 | 5.59 | 3.57 | 3.78 | 4.83 |
| 22 | 8613.83 | 5.84 | 1.55 | 2.03 | 1.75 | **17.8** | 11.22 | **19.69** | 4.07 | 1.64 | 1.37 | **18.26** |
| 23 | 8646.95 | **23.55** | 2.19 | 2.28 | 3.04 | 8.02 | 4.06 | 5.96 | 20.49 | 5.24 | 3.87 | 7.13 |
| 24 | 8703.28 | 6.58 | **20.43** | **19.7** | **21.16** | 4.16 | 2.69 | 4.19 | 5.73 | **16.01** | **21.94** | 4.32 |
| 25 | 8945.17 | 12.43 | 3 | **19.02** | 16.5 | 11.96 | 8.31 | 7.25 | 10.85 | 13.15 | 2.5 | 5.46 |
| 26 | 9016.11 | 3.2 | **17.47** | 5.59 | 4.22 | 6.07 | 4.23 | 14.69 | 4.95 | 3.9 | 17.34 | 3.05 |

§List of MS peaks used to distinct *Culex* species based on the Genetic Algorithm model analysis of ClinProTools. \*The top-five mass peaks per *Culex* species are indicated in bold. #MS peaks for which mass-to-charge ratio (m/z) were similar with legs top-five MS peak list (see Additional file S3). Da: Daltons; m/z: mass to charge; a.u.: arbitrary unit.