**Supplementary Figure 1.** Comparison of MALDI-TOF MS spectra from mosquitoes at late aquatic stages using abdomen or whole larva. Representative MS spectra from Cs. longiareolata (i) and Culex p. pipiens (ii) using abdomens (A-B, E-F) or whole larvae (C-D, G-H). a.u., arbitrary units; m/z, mass-to-charge ratio.



**Supplementary Figure 2.** MALDI-TOF MS spectra of whole mosquitoes at early instar, late instar and pupal stages. Representative MS spectra from Cs. longiareolata (i) and Culex p. pipiens (ii) at early (A-B), late (C-D) or pupae (E-F) stages. The LSVs obtained for respective MS spectra queried against the database are listed to the right of each spectra. a.u., arbitrary units; m/z, mass-to-charge ratio; LSVs, Log score values.



**Supplementary Figure 3.** MS spectra from Cx. p. pipiens fourth instar larvae. (i) Representative MS spectra from whole Cx. p. pipiens larvae with (A-B) or without green color (C-D). To the right of each MS spectra are LSVs obtained for each MS spectrum queried against the database. (ii) Photograph of the cephalothorax of a Cx. p. pipiens larva presenting green coloring. a.u., arbitrary units; m/z, mass-to-charge ratio; LSVs, Log score values.

