

Figure S1. Chromatograms obtained by GC-MS of cuticular extracts from females of the parasitic wasp *Lariophagus distinguendus* reared on the host *Acanthoselides obtectus* and for comparison chromatograms of the respective host (adult and larval stage). Numbers and asterisks indicate in descending order the 11 compounds with contributions > 1 to the average dissimilarity (Table 2) of the CHC profiles as revealed by similarity percentage analysis (SIMPER). 1 = 3,7,11,15-TetraMeC33; 2 = 11,21 - +11,15-DiMeC33; 3 = unknown; 4 = 3,7,11-TriMeC33; 5 = 3,7-DiMeC33; 6 = 15 - +13 - +11-MeC33; 7 = 4,8-DiMeC34; 8 = 3-MeC33; 9 = 13,17-DiMeC35; 10 = 3-MeC27; 11 = C33:1(9).



Figure S2. Chromatograms obtained by GC-MS of cuticular extracts from females of the parasitic wasp *Lariophagus distinguendus* reared on the host *Lasioderma serricorne* and for comparison chromatograms of the respective host (adult and larval stage). Numbers and asterisks indicate in descending order the 11 compounds with contributions > 1 to the average dissimilarity (Table 2) of the CHC profiles as revealed by similarity percentage analysis (SIMPER). 1 = 3,7,11,15-TetraMeC33; 2 = 11,21 + 11,15-DiMeC33; 3 = unknown; 4 = 3,7,11-TriMeC33; 5 = 3,7-DiMeC33; 6 = 15 + 13 + 11-MeC33; 7 = 4,8-DiMeC34; 8 = 3-MeC33; 9 = 13,17-DiMeC35; 10 = 3-MeC27; 11 = C33:1(9).



Figure S3. Chromatograms obtained by GC-MS of cuticular extracts from females of the parasitic wasp *Lariophagus distinguendus* reared on *Sitophilus granarius* and for comparison chromatograms of the respective host (adult and larval stage). Numbers and asterisks indicate in descending order the 11 compounds with contributions > 1 to the average dissimilarity (Table 2) of the CHC profiles as revealed by similarity percentage analysis (SIMPER). 1 = 3,7,11,15-TetraMeC33; 2 = 11,21- + 11,15-DiMeC33; 3 = unknown; 4 = 3,7,11-TriMeC33; 5 = 3,7-DiMeC33; 6 = 15- + 13- + 11-MeC33; 7 = 4,8-DiMeC34; 8 = 3-MeC33; 9 = 13,17-DiMeC35; 10 = 3-MeC27; 11 = C33:1(9).



Figure S4. Chromatograms obtained by GC-MS of cuticular extracts from females of the parasitic wasp *Lariophagus distinguendus* reared on *Stegobium paniceum* and for comparison chromatograms of the respective host (adult and larval stage). Numbers and asterisks indicate in descending order the 11 compounds with contributions > 1 to the average dissimilarity (Table 2) of the CHC profiles as revealed by similarity percentage analysis (SIMPER). 1 = 3,7,11,15-TetraMeC33; 2 = 11,21 + 11,15-DiMeC33; 3 = unknown; 4 = 3,7,11-TriMeC33; 5 = 3,7-DiMeC33; 6 = 15 + 13 + 11-MeC33; 7 = 4,8-DiMeC34; 8 = 3-MeC33; 9 = 13,17-DiMeC35; 10 = 3-MeC27; 11 = C33:1(9).