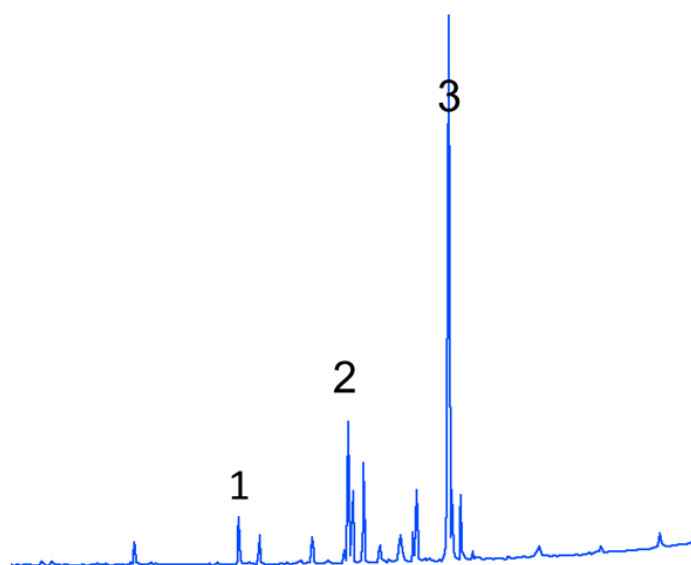


Nongroomed antennae



Groomed antennae

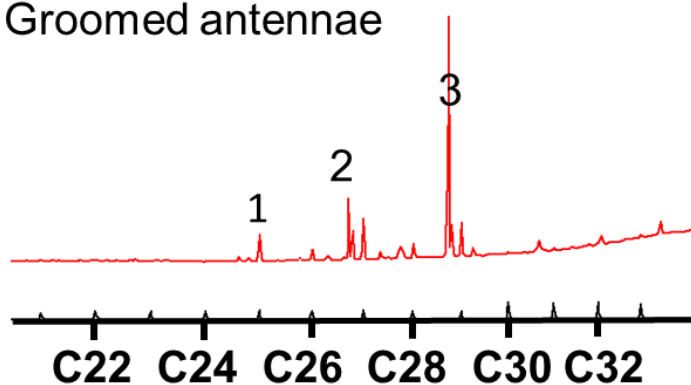


Figure S1. Gas-chromatograms of nongroomed and groomed antennal cuticular hydrocarbons of *C. japonicus*. Cuticular hydrocarbons (CHCs) accumulate on nongroomed antennae of *C. japonicus* workers. Isolated antennae from 10 workers that were self-grooming limited for 24 h or nonlimited were dipped in *n*-hexane for 5 min to extract antennal CHCs. Extracted CHCs were purified by a silica gel column and applied to the GC analysis. Detail method and peaks are as reported by Ozaki et al. (2005) [33]: *n*-pentacosane (Peak 1), 9-heptacosene (Peak 2), and 9-nonacosene (Peak 3), for example.