

Phenol – Another Cockchafer Attractant Shared by *Melolontha hippocastani* Fabr. and *M. melolontha* L.

Joachim Ruther^{a*}, Andreas Reinecke^a, Till Tolasch^b, and Monika Hilker^a

^a Institut für Biologie, Freie Universität Berlin, Haderslebener Str. 9, D-12163 Berlin, Germany. E-mail: ruther@zedat.fu-berlin.de

^b Institut für Organische Chemie, Universität Hamburg, Martin-Luther-King-Platz 6, D-20146 Hamburg

* Author for correspondence and reprint requests

Z. Naturforsch. **57c**, 910–913 (2002); received June 18, 2002

Phenol, Attractant, *Melolontha* sp., Scarabaeidae

The response of the two most abundant cockchafer species in central Europe, *Melolontha hippocastani* and *M. melolontha*, towards phenol, mixtures of phenol with the leaf alcohol (Z)-3-hexen-1-ol and the known cockchafer pheromones, 1,4-benzoquinone (*M. hippocastani*) and toluquinone (*M. melolontha*), was investigated in the field. During the swarming period at dusk, phenol attracted males of both species, and enhanced the known attraction of cockchafer males towards (Z)-3-hexen-1-ol. A mixture of phenol plus (Z)-3-hexen-1-ol was less attractive for *M. hippocastani* males than a mixture of (Z)-3-hexen-1-ol plus 1,4-benzoquinone, whereas phenol plus (Z)-3-hexen-1-ol attracted as many *M. melolontha* males as a mixture of (Z)-3-hexen-1-ol plus toluquinone. In both species three component mixtures containing phenol, (Z)-3-hexen-1-ol, and the respective benzoquinone did not capture more males than two component mixtures consisting of only (Z)-3-hexen-1-ol and the benzoquinone. A possible role of phenol as another cockchafer sex pheromone component is discussed.