

Species Spectrum of Flea Beetles (*Phyllotreta* spp., Coleoptera, Chrysomelidae) Attracted to Allyl Isothiocyanate-Baited Traps

Miklós Tóth^{a,*}, Éva Csonka^a, Flórián Bakcsa^b, Pál Benedek^b, István Szarukán^c,
Stanislav Gomboc^{d,g}, Teodora Toshova^e, Mitko Subchev^e, and István Ujváry^f

^a Plant Protection Institute, HAS, P. O. Box 102, H-1525, Budapest, Hungary.
Fax: +361-3918655. E-mail: h2371tot@ella.hu

^b University of Western Hungary, Agricultural Faculty, Mosonmagyaróvár, Hungary

^c Debrecen University, Centre for Agricultural Science, Debrecen, Hungary

^d University of Ljubljana, Biotechnical Faculty, Department of Agronomy, Ljubljana,
Slovenia

^e Institute of Zoology, BAS, Sofia, Bulgaria

^f Chemical Research Center, Hungarian Academy of Science, Budapest, Hungary

^g Present address: Phytosanitary Administration of the Republic of Slovenia, Ljubljana,
Slovenia

* Author for correspondence and reprint requests

Z. Naturforsch. **62c**, 772–778 (2007); received March 20/April 26, 2007

In field tests in Hungary, Slovenia and Bulgaria, in allyl isothiocyanate-baited traps significantly more beetles of *Phyllotreta cruciferae*, *Ph. vittula*, *Ph. undulata*, *Ph. nigripes*, *Ph. nodicornis*, *Ph. balcanica*, *Ph. atra*, *Ph. procera*, *Ph. ochripes*, *Ph. diademata* and *Psylliodes chrysocephalus* (Coleoptera, Chrysomelidae, Halticinae) were captured than in unbaited control traps. With the exception of *Ph. cruciferae*, this is the first report on significant field attraction by allyl isothiocyanate for these species. The species spectrum captured included six important agricultural pests. At all sites a great portion of the catch (ranging from ca 30 to 98%) was *Ph. cruciferae*, irrespective of the plant culture. The second most abundant species present at most sites was *Ph. vittula*. The present results are very promising from the point of view of applicability of allyl isothiocyanate in Europe as a bait in cabbage flea beetle traps for detection and monitoring.

Key words: *Phyllotreta*, Allyl Isothiocyanate, Trapping