Field survival analysis of adult *Diabrotica virgifera virgifera*

Analyse der Überlebensrate von Diabrotica virgifera virgifera *im Feld*

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In order to develop models on the population dynamics of the maize pest *Diabrotica virgifera virgifera*, survival rates of its eggs, three larval instars, pupae and adults need to be known. In contrast to the already studied and reported survival rates for the immature stages of this pest, the survival of *D. virgifera virgifera* adults had not been entirely clarified under field conditions. Particularly the understanding of the likely main period for oviposition of *D. virgifera virgifera* populations in the field (after a pre-oviposition period) would help to plan the timing for interventions by direct control measures against the adults. Therefore, the survival of *D. virgifera virgifera* adults was studied in two field sites in Hungary between 2009 and 2011. Between 8 and 22 large gauze cages (ca. 4 x 2 x 2 m) were placed into each of the two study fields, and about 50 newly emerged female and 50 male adults were released in each cage (usually in mid-July) of each year. Survival was recorded weekly until no beetles were found any more, i.e. usually in September. The populations of adult *D. virgifera virgifera* rapidly decreased with time following an ln-like curve. Male and females had comparable survival patterns. Survival analysis is currently developed and discussed for their use in understanding and modelling population dynamics of *D. virgifera virgifera*.

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