

# Forest insects attracted to ground traps baited with turpentine and ethanol on clear-cuttings

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During a ten-year study carried out on clear-cuttings in an intensively managed forest area (forest district of Rāpina, Estonia) with the use of original ground traps baited with a blend of turpentine and ethanol, a total of 54 951 insect specimens were caught. The percentages of trapped insect individuals were the following: *Hylobius abietis* 68 %, *Hylobius pinastri* 1%, bark beetles of the genus *Hylastes* 21 %, other Scolytidae 3 %, and all other insect species 7 %. A list of insect species trapped on clear-cuttings, and their total number are presented. The traps used to monitor *Hylobius abietis* and associated root-colonizing *Hylastes*-species had relatively weak effects on non-target insects: besides pine weevils (*H. abietis*, *H. pinastri*) and bark beetles (Scolytidae), only 7 % individuals of other insect species were caught. Several rare or relatively scarce species were also caught with these traps: *Carabus nitens*, *C. violaceus*, *Plegaderus saucius*, *Geotrupes vernalis*, *Platycerus caprea*, *Ernobius nigrinus*, *Coniocleonus hollbergi*, *Hylurgus ligniperda*, etc. This indicates that species richness has been preserved quite well in spite of current intensive forest management practices. However, felling volume and area have rapidly increased during recent years, which may present threat for some insect species in the future.

Key words: clear-cutting, Coleoptera, Estonia, *Hylobius abietis*, pitfall traps.

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