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SEMIOCHEMICAL-BASED MANAGEMENT OF THE LARGER PINE SHOOT BEETLE, *TOMICUS PINIPERDA*

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An optimized, patented lure for the larger pine shoot beetle, *Tomicus piniperda* has been developed and tested in the United States, Poland, and Croatia. Seven different beetle attractants were tested: α -pinene, α -pinene oxide, ethanol, nonanal, myrtenal, myrtenol, and trans-verbenol. α -pinene was tested alone or in combination with two or more of the remaining compounds. Attraction of all candidate lures was compared to attraction of Tomodor, a Polish commercial lure for *T. piniperda*, using the Intercept[®] Panel Trap (PT). A lure containing α -pinene, α -pinene oxide, nonanal, myrtenal, myrtenol, and trans-verbenol was used to compare trap captures in Intercept PT with 12-unit multi-funnel traps in USA, Theyson trap in Croatia, and IBL-3 trap in Poland. This study demonstrated that at least a quaternary semiochemical combination, including α -pinene, nonanal, trans-verbenol, and myrtenol is required to assure maximum trap captures. The best IPM Tech lure was significantly more attractive than Tomodor when tested in Poland and Croatia. Catches of *T. piniperda* in the Intercept PT were significantly higher than in the IBL-3 trap or Theyson trap.