Occurrence of click beetle pest spp. (Coleoptera, Elateridae) in Europe as detected by pheromone traps: survey results of 1998-2006

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The implementation of IPM strategies against wireworms has been very difficult because of the shortage of reliable information on the key aspects of the species until few years ago. One of this key aspect is represented by the species distribution over the different European regions. Knowing the species present allows to establish promptly oriented monitoring programs saving time and materials and a general prediction of damage risk for the sensitive crops based on the knowledge of biology and behaviour of the different Agriotes species. A reliable description of the distribution of the main Agriotes species (A. brevis, A. lineatus, A. obscurus, A. proximus, A. rufipalpis, A. sordidus, A. spaltator and A. sputator) is currently possible because pheromone traps suitable for monitoring all the most important Agriotes species in Europe are available.

They proved to be effective to detect the presence of species also at very low population levels. First maps of species were presented at the last IOBC meeting on soil insects held in Innsbruck.

In this poster we present the updated distribution maps for these click beetle species, compiled from results of surveys using pheromone traps in many regions of Europe between 1998 - 2006.

Traps captured large numbers of A. brevis in Italy at all sites tested. Presence of this species was detected also in Slovenia, Austria, Bulgaria (near Sofia) and Hungary. In Romania, Croatia and some sites in Hungary, the bait was catching A. spaltator probably due to the presence of a sex attractant (Bulgaria). Seldom, very low catches of A. spaltator were recorded in France, Germany, Switzerland, Croatia, Serbia, Romania, Bulgaria, Austria, Slovenia and Hungary. In Romania, traps captured large numbers of A. obscurus, A. proximus, A. rufipalpis, A. sordidus, A. spaltator and A. sputator. In Bulgaria, several sites caught A. spaltator. Catchs of lower numbers of A. lineatus, A. litigiosus, A. obscurus, A. proximus, A. rufipalpis, A. sordidus, A. sputator and A. spaltator were observed in Italy, Portugal, Spain, France, Greece, and other parts of Italy. The sensitive crops based on the knowledge of biology and behaviour of the different species until few years ago. One of this key aspect is represented by the species distribution over the different European regions. Knowing the species present allows to establish promptly oriented monitoring programs saving time and materials and a general prediction of damage risk for the sensitive crops based on the knowledge of biology and behaviour of the different Agriotes species. A reliable description of the distribution of the main Agriotes species (A. brevis, A. lineatus, A. obscurus, A. proximus, A. rufipalpis, A. sordidus, A. spaltator and A. sputator) is currently possible because pheromone traps suitable for monitoring all the most important Agriotes species in Europe are available.

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