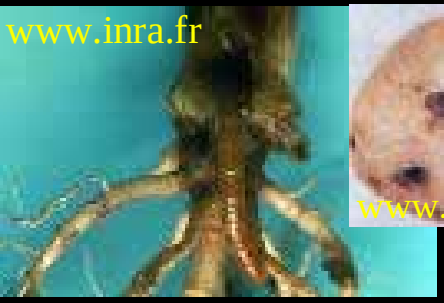
Click beetle - *Agriotes proximus* Schwarz

The beetle is 7-11 mm long, and tries to escape in case of danger through "clicking" – true to its name. Similarly to other click beetles, its shape is despite being elongated, appears to be stubby, as the margin of its broad thorax runs down beside the shoulder of the elytrae. The species is morphologically very similar to *A. lineatus*. Species identification of click beetles needs some expertize and a binocular microscope, or at least a good hand magnifier.

Host plants of the larva include maize, cereals, sunflower, sugar-beet, potatoes, other grasses, and also many other plants, i.e. tomatoes. The larvae feed on the roots. The adult beetle feeds on leaves of grasses. The damage is caused by the larvae, the wireworms, which eat up hatching seeds and roots inside the soil. Damages are variable depending on the plant species attacked and the type of soil. Indicators of damage can be imperfect hatching of seedlings (maize), damaged hatchlings and roots, yellow colouring of the plant parts above ground. Pheromone traps should be placed at the soil. Usual beginnning of trapping in Portugal is beginning of April.

The beetle, which is captured in the trap



The larva and its damage, which should be averted

Selectivity of the CSALOMON® pheromone trap: the bait attracts equally well also *A. lineatus*. In tests conducted at several sites in Europe occasionally some specimens of *A. obscurus* were captured. They are smaller and do not have the "lines" on the elytrae characteristic to *A. proximus* and *A. lineatus* .

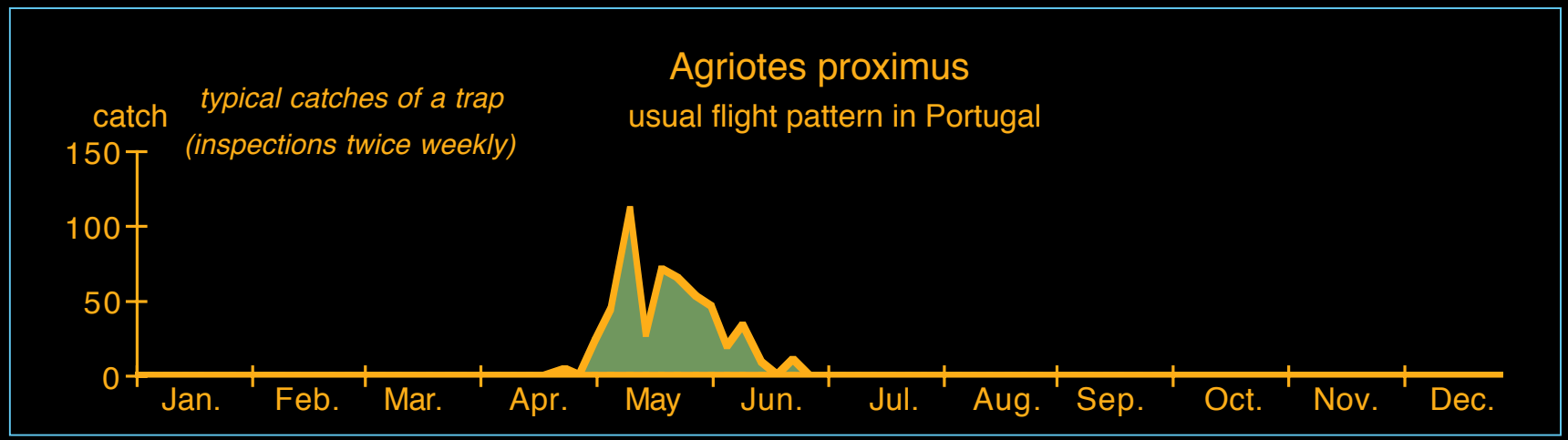
The bait of the CSALOMON® pheromone trap starts slowly to decrease its attractive activity after 6-8 weeks of field exposure (depending on actual weather conditions). After this period it is advisable to exchange the bait to a new one. BE SURE TO USE THE SAME BAIT AS BEFORE IN THE SAME TRAP; mixing baits for different species may hamper activity seriously!

Control of wireworms should be based on reliable forecasting. Application of pheromone traps is much easier and simpler that other sampling methods utilized before (i.e. soil sampling, etc.). Pheromone traps detect the occurrence of the pest very sensitively, so that infestation centers can be "mapped" and treated by insecticide easily.

The non-sticky trap types are capable of catching very large numbers of beetles without being saturated. Detailed measurements for *A. proximus* are not yet available. According to experience in Italy on the closely related *A. ustulatus*, if the average catch per trap does not exceed 150-200 specimens per year, damage is highly improbable on the given field[1]. In case of higher captures, it is advisable to perform larval sampling (soil cores) for more accurate estimation of population levels. If protection is necessary, it may be performed through agrotechnical means, crop rotation or in more severe cases by soil insecticides[2]. More accurate establishment of correlations between trap captures and larval density in different cultures are underway (Lorenzo Furlan, pers. comm.)


Yf trap for catching click beetles

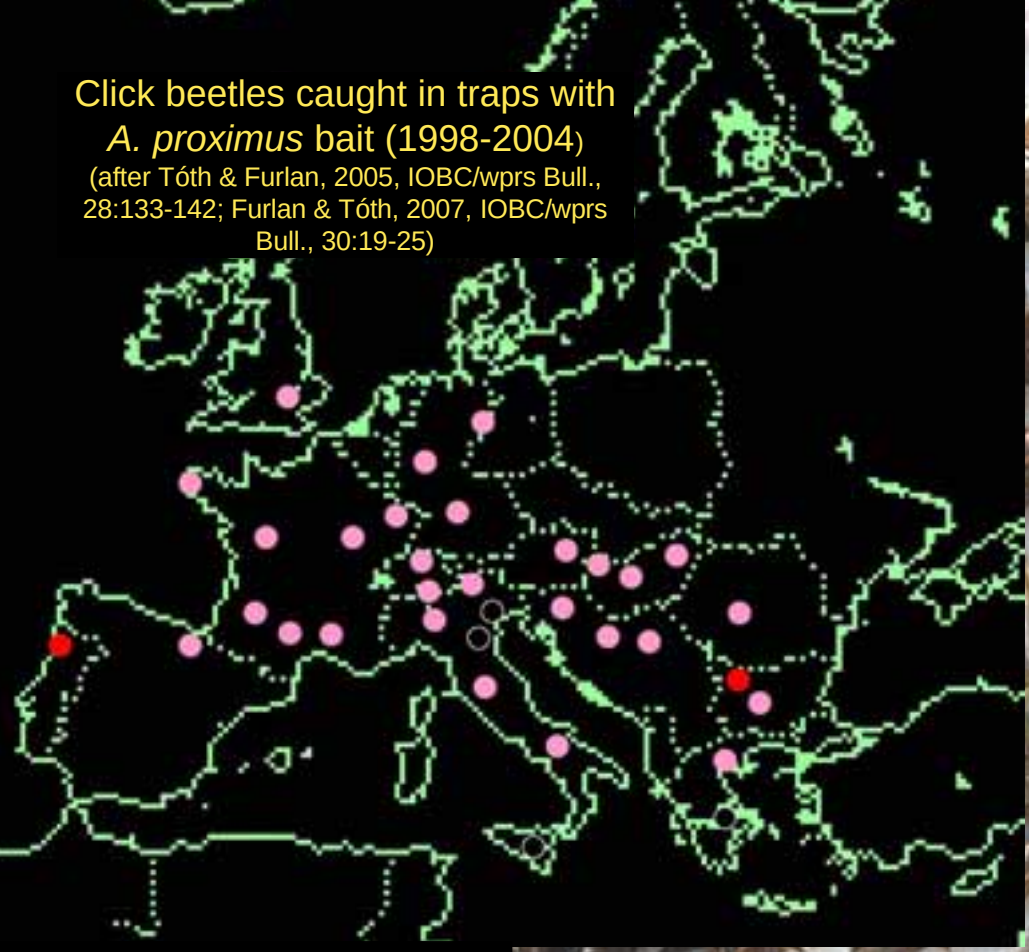
[1] *Furlan, L. et al., ATTI Giorn.Fitopat. 1:133-140, 1996;* [2]*Jermy T, Balázs K. (szerk.) A növényvédelmi állattan kézikönyve. Akadémiai Kiadó, Budapest, 1990.*



To order / to inquire: MTA ATK Növényvédelmi Intézet (Plant Prot. Inst. MTA ATK) Budapest, Pf 102, H-1525, Hungary; phone. +(36-1)-391-8637, +(36)-30-9824999; fax +(36-1)-3918655; e-mail: <csalomon.orders@julia-nk
or <h2371tot@ella.hu>; internet: <http://www.julia-nki.hu/traps/>.

Click beetles caught in traps with *A. proximus* bait (1998-2004)

(after Tóth & Furlan, 2005, IOBC/wprs Bull., 28:133-142; Furlan & Tóth, 2007, IOBC/wprs Bull., 30:19-25)



- lineatus catches
- proximus catches
- no catch

Photo: Tóth M.

So it looks when caught in the CSALOMON® Yf trap!