## Yellowjackets - Vespa (Paravespula) spp.

The body of the social wasp species (yellowjackets) is yellow with black stripes. They can bite painfully with the poisonous sting at the tip of their abdomen, which may cause a more or less serious health problem to the person attacked.

Mortal attacks to humans have already been recorded in case of *Vespa crabro*! The overwintering female queen builds a nest in the spring, and workers start to emerge continously from the nest after the begining of summer until the first frosts. Depending on species, nests can house from a couple of dozens to several tens of thousands of workers! Yellowjackets are generally predatory, but they also need to feed on sweet fluids. This is why they chew holes and feed on ripened fruit, causing economic damage by this activity. They attack first of all grapes, pears, but also can damage plums, peaches, apples etc. Most workers develop in the nests in late summer, the period when most fruits ripen. In case of a long, dry autumn one can expect prolonged damages.

The trap should be placed at the height of 0.5 - 1.5 m, or set at the soil level, in any case at a sunny place. Yellowjackets visit with preference sunny, conspicous branches, edges, but they do not like to stay in a shady place. Usual start of trapping in Hungary is beginning of July, or when yellowjackets are so numerous that they start to cause a nuisance.



The damage of the insect, which should be averted



Vespa crabro and Vespa germanica which are captured in the trap

One should fill a 0.2-0.3 litre volume into the catch container of the CSALOMON® VARL yellowjacket trap from the following solution (be sure to tighten the rubber string holding the catch container in place, lest the weight of the fluid turn the container out from the trap body):

- 1 part beer (light lager beers proved to be suitable)
- 1 part orange juice (natural 100% orange juice proved to be suitable)
- 1 part of a 2% water solution of boric acid (preparation: in one litre of warm water dissolve 20 g of boric acid can be obtained from a pharmacy).

The boric acid solution is not necessary for the attraction. Its function is to slow down rotting of the captured insects thus hampering the production of stinking smells.

If this is not a significant consideration, the boric acid solution can be left out.

The above mixture attracts yellowjackets already on its own. If we add the CSALOMON® supplementary yellowjacket synthetic bait to the trap (placing it below the roof of the trap), captures will be significantly increased. The supplementary yellowjacket synthetic bait will gradually loose its effect after 4-6 weeks of field exposure. After this time it is advisable to replace it with a fresh bait.



According to experience in Hungary the supplementary yellowjacket synthetic bait attracts strongest *Vespa vulgaris*, *V. germanica* and *V. crabro*. It is less active towards *Polistes* spp. It DOES NOT attract at all honeybees (*Apis mellifera*). The bait attracts also several fly spp. of the families Sarcophagidae and Calliphoridae, but it does not attract the housefly (*Musca domestica*). Volatiles from the beer/orange juice mixture can attract apart from yellowjackets several moths and other insects as well, of which many are pests, thus their capture may prove to be advantageous.

Applying the CSALOMON® traps one can lower the numbers of yellowjackets in the garden or vineyard. It is most efficient if we localize the nest and in the night, when the workers are all inside, we destroy it. By operating a network of traps one can determine the locality of nests easily. The synthetic bait is also attractive towards overwintering queens. Through operating traps until the first frosts or early in the spring the queens can be trapped which results in less yellowjacket nests in the neighbourhood.



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This is how to place the yellowjacket lure dispenser into the VARL trap

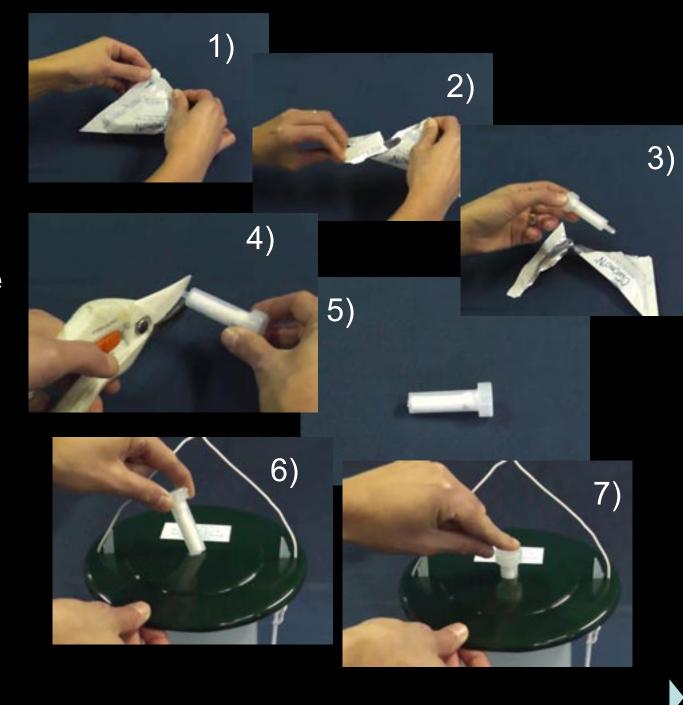




Photo: Nagy Z. L.