

## Vine chafer - *Anomala vitis* F. and margined vine chafer - *A. dubia* Scop.



*The beetles, which are captured in the trap*

Both beetles are with metallic colour. Their shape is also similar, and in both species the femur of the 3rd legs is very thick. Their antennae are the "lamellicorn" antennae characteristic to the family. The sizes are a bit different: the vine chafer is 14-18 mm, while the margined vine chafer is 11-15 mm long. The vine chafer is usually emerald green, while the margined vine chafer has basically yellowish elytrae with a metallic tinge, but there are also greenish or blueish variations.

Their host plants include grapes, walnuts, plums, cherries, sour cherries, apples, and also willow, poplars, *Tilia*. In case of the margined vine chafer the host plant range includes also *Pinus*, cereals, maize, carrots, tomatoes and other weedy plants. The beetles feed on the leaves and in case of heavy damage only the veins can remain. The beetles feed in aggregations, sometimes both species cause damage at the same time. The larvae which develop inside the soil for several years first feed on humus, then on the roots of plants.

The pheromone trap should be suspended from branches of trees or bushes, or, in case of a vegetable culture, be placed on the ground. In Hungary the usual beginning of trapping is in the middle of May.

Selectivity of the CSALOMON® pheromone trap (based on field tests in Hungary): the bait doesn't attract any other species apart from the two *Anomala* spp. Other insects found in the trap are chance captures. The selective pheromone bait of the related *A. solida* (pls. refer to our List of Products) does not catch *A. vitis* / *dubia*. However, it is possible to apply both baits (for *A. solida* and for *A. vitis* / *dubia*) together in the same trap, because they do not interfere with each other. Thus we shall have a trap catching all three important *Anomala* species. It is advisable to empty the traps at least weekly, because the putrefying carcasses of captured beetles might attract large numbers of flies to the traps.

Longevity of the CSALOMON® trap in field conditions: depending on the warmth of the weather at least 6-8 weeks. After this period we suggest to replace the bait for most effective detection and monitoring.

The suggested trap type is VARb3, a modified funnel trap.



Photo: E. Voigt

*The damage of the beetles which should be averted*



The CSALOMON® traps capture the male beetles and can be used for sensitive detection of the occurrence of the pest or for monitoring the flight pattern throughout the season. When using a trap grid, the sites of aggregation can easily be located and eliminated.

The VARb3 funnel traps can also be used for direct control: when setting up a double line of traps around the perimeter of a peach orchard (trap distance of 10 - 15 m), damages of fruit injuries could be kept at an acceptably low level.[1]

The application of the CSALOMON® traps for mass trapping is more convenient than the traditional method of control generally suggested against scarabs consisting of knocking down the beetles from the vegetation at dawn.[2] In any case this latter method is not much suitable for vine chafers since in contrast to the May beetles (*Melolontha* spp.), the *Anomala*, when knocked down, usually take wing very easily or hide in the soil. When mass trapping the vine chafers, as a side benefit, the large volume of captured beetles in the traps can be fed to chicken or other poultry in organic farms.

[1] Voigt E, Tóth M.. *Acta Zool. Acad. Sci Hung.*, 48:297-303, 2002. [2] Jermy T, Balázs K. (eds.) *Handbook of Plant Protection (in Hung.) Akadémiai Kiadó, Budapest, 1990*



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Photo: E. Voigt

Leaf damages of *Anomala* scarabs in a cherry orchard



*A. dubia*

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Photo: Z. L. Nagy

So it looks when caught in the CSALOMON® VARb3 trap!

