

How to use? The CSALOMON® VARb3 trap, with pheromone bait of *Anomala* chafers

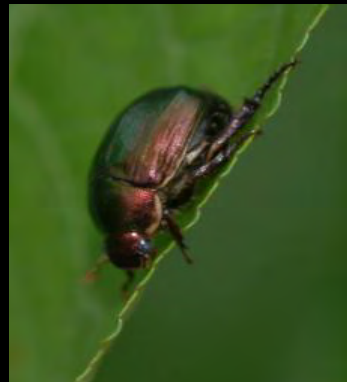


vine chafer (*Anomala vitis*)



margined vine chafer (*Anomala dubia*)

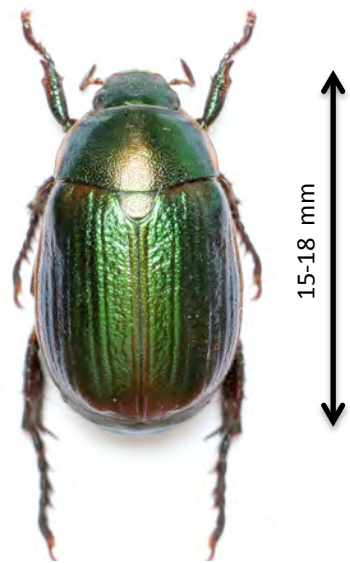
These two species can be trapped with the very same lure in VARb3 traps!



green chafer (*Anomala solida*)

This species has his own lure, different from the lure of the above two, can be captured also with VARb3 trap.

The VARb3 trap can be applied to follow the spread into new areas, to detect beginning of flight and to follow seasonal occurrence, to time control measures (if necessary) and through mass trapping for decreasing the damage.



Vine chafer
(*A. vitis*)

Vine chafer (*Anomala vitis*) and margined vine chafer (*A. dubia*)

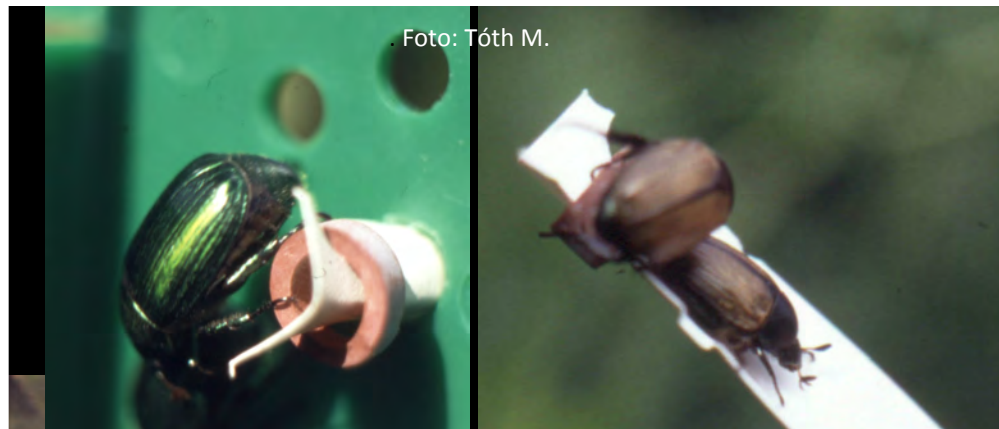


Foto: Tóth M.

The lure of the vine and margined vine chafers is the same. On the fotos: beetles investigating the pheromone lure (Foto: Tóth M.)



Foto: Mikiulás J.

Margined vine chafer (*A. dubia*)
– it has very many colour variations!



Foto: Voigt E.



Foto: Voigt E.



Foto: Péntes B.

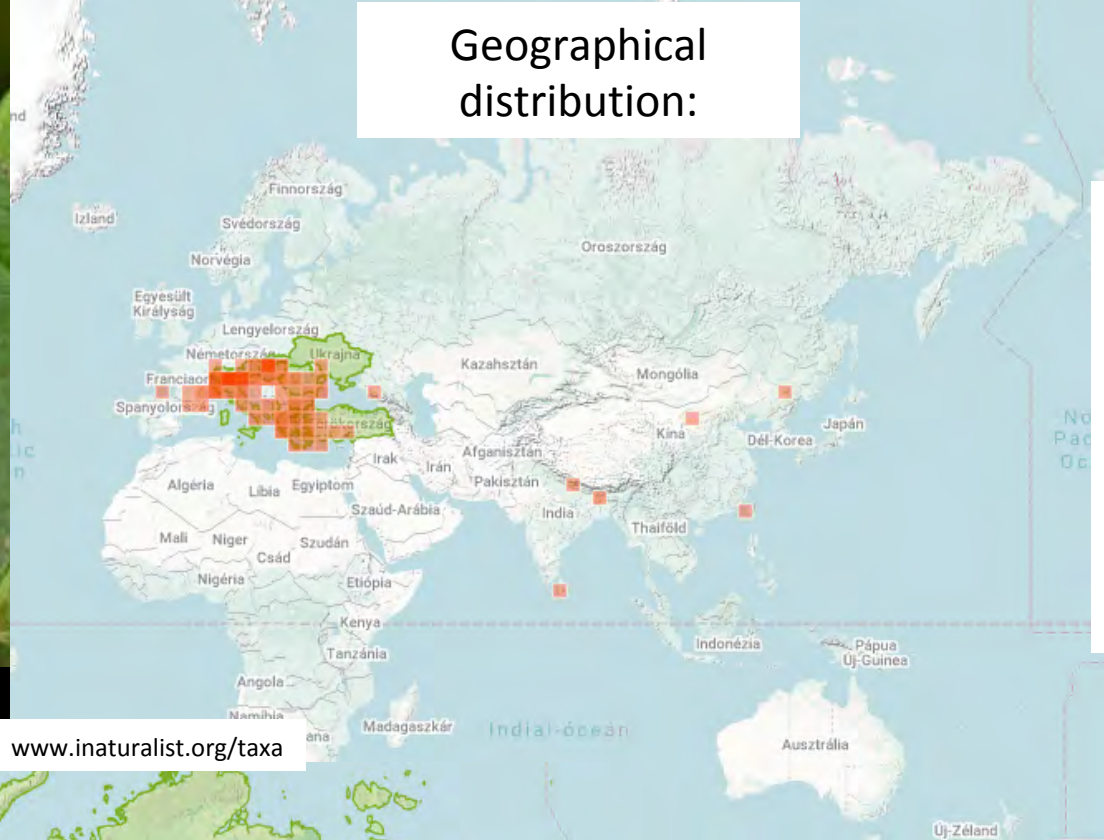
The vine chafer damages leaves mainly in vineyards and young cherry plantations. It is most harmful when damaging ripening peach fruits right before or during harvest.

The margined vine chafer causes first of all green leaf damage, it damages fruits only rarely.

Geographical distribution:



Vine chafer
(*A. vitis*)



www.inaturalist.org/taxa

The vine chafer is abundant in Central and Southern parts of Europe, preferring sandy and loess soils. It can cause highly significant fruit damages in peach orchards on the Great Hungarian Plain and neighbouring areas.



Margined vine chafer (*A. dubia*)

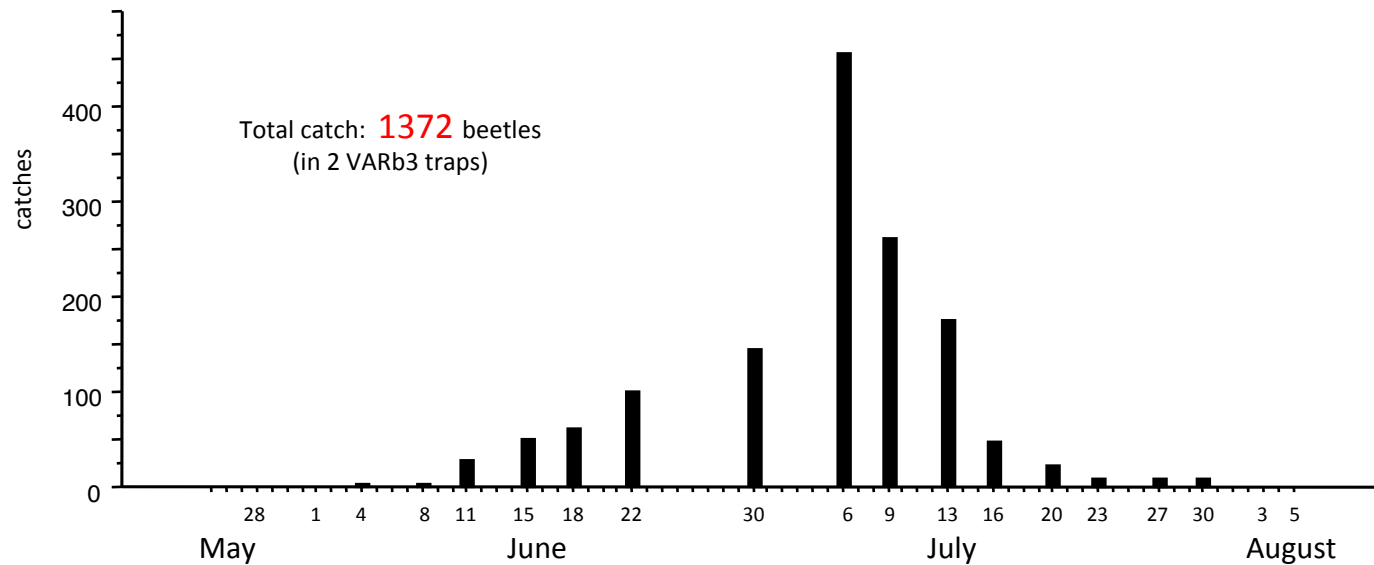
The margined vine chafer is more widespread in Europe with the exception of northernmost countries. Most significant damages are recorded in young cherry or sour cherry plantations.

Seasonal occurrence, flight pattern:



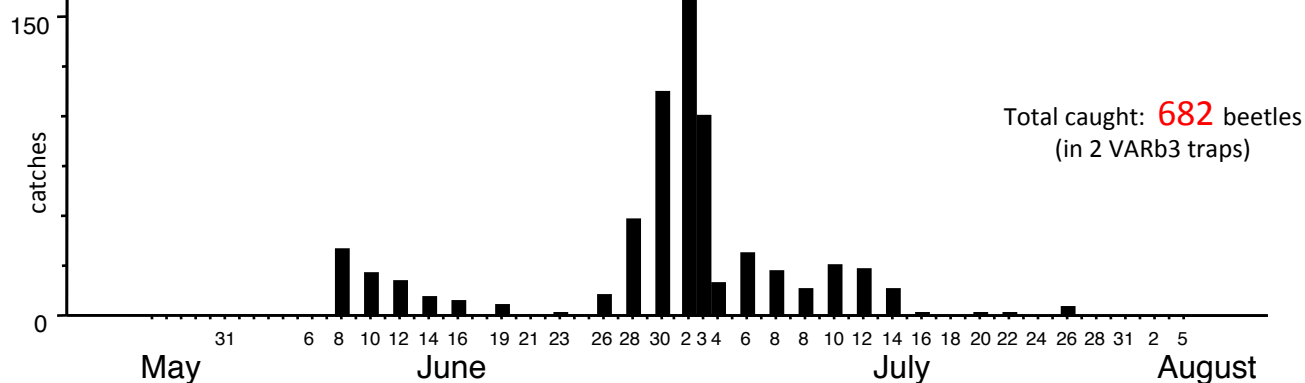
Vine chafer
(*A. vitis*)

Flight of vine chafer (vineyard, Kecskemét, Hungary, 2011; after: [Agrofórum 23:50-52, 2012](#))



Both chafers fly and cause damage in the middle of summer, in June-July.

Flight of margined vine chafer (backyard garden, Debrecen, Hungary 1994) (after: Szarukán I. and Tóth M., nem unpubl.)



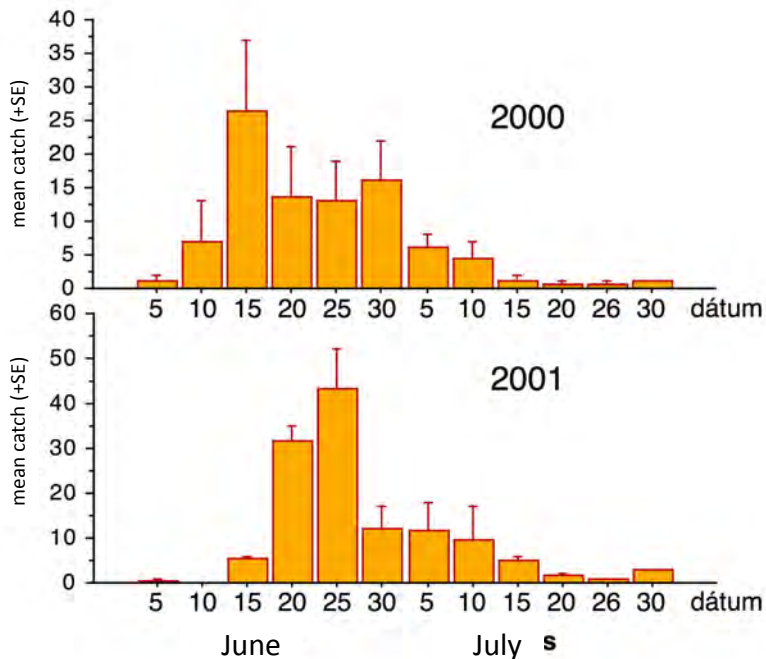
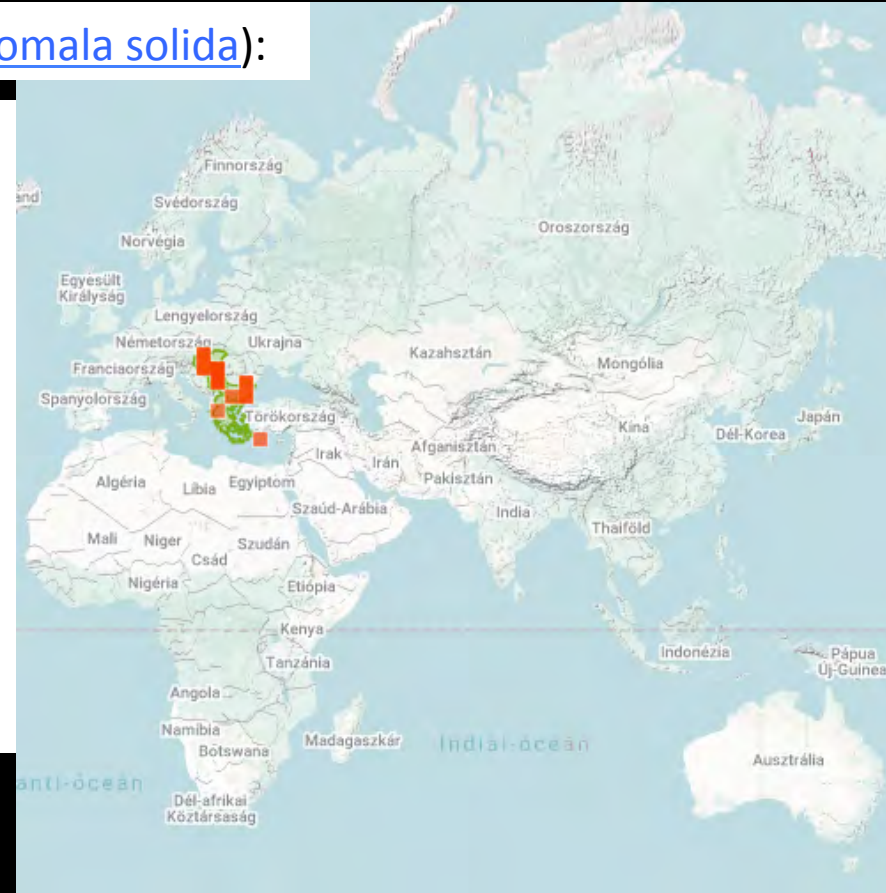
Margined vine chafer (*A. dubia*)



The green chafer ([Anomala solida](#)):

The green chafer has a narrower distribution as compared to the other two chafers. It occurs in the Hungarian Great Plain area and neighbouring countries to the south. In the past only sporadic reports have been published on its damage, but suddenly it showed a great gradation in Hungary in the beginning of the 2010-s.

([Agrofórum 22:52-54, 2011](#)).



The green chafer flies similarly to the other two in the middle of the summer (Kjustendil, Bulgaria, 2000 and 2001) (after: [Annuaire de l'Université de Sofia "St. Kliment Ohridski" 96:197-200, 2004.](#))



Foto: Pénzes B.

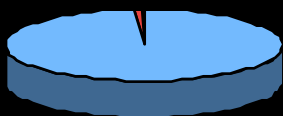
How can a grower decide which of the 3 chafers is significant in his area? (Since several of the many colour variations of *A.solida* can be told apart only by an expert form specimens of *A. vitis*.)

VARb3 trap,
with **solida** lure
ONLY

VARb3 trap,
with **vitis/dubia** lure
ONLY



Kecskemét, Hungary, 2010; total caught: 8058 beetles.



The simplest is if we set out traps with only the **solida** lure, and another one with only the **vitis/dubia** lure. Since the solida lure catches ONLY green chafers, and the vitis/dubia lure catches ONLY vine and margined vine chafers, one can conclude which is the dominant species in the area based on which trap was catching.

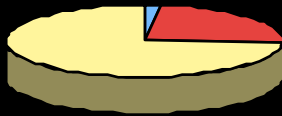
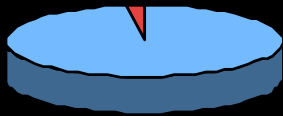
(After: [Agrofórum 23:50-52, 2012](#))

VARb3 trap,
with **solida** lure
ONLY

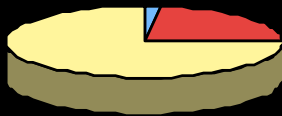
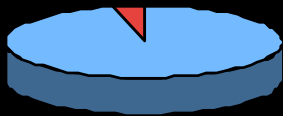
VARb3 trap,
with **vitis/dubia** lure
ONLY

VARb3 trap, with
vitis/dubia AND
solida lures

Kecskemét, Hungary, 2011/ 1; total caught: 11441 beetles.



Kecskemét, Hungary, 2011/ 1; total caught: 6294 beetles.



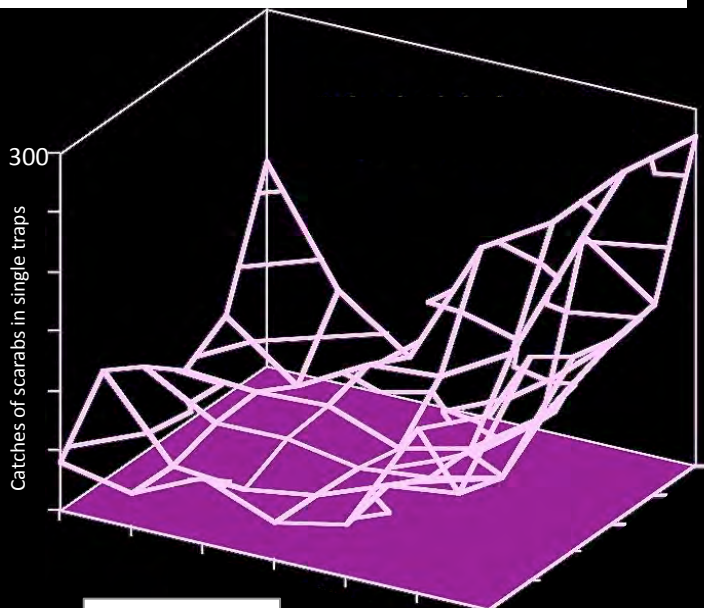
It is also possible to put both the **vitis/dubia** AND the **solida** lures together in one VARb3 trap, as (in contrast to other pheromones) the two types of lures do not interfere with each other. Such a trap would catch all three chafers! (After: [Presentation at the IOBC/WPRS Conference, Bursa, Turkey 2012](#))



Decreasing damages through mass trapping of *Anomala* chafer

In contrast to the widespread sex pheromone traps of moths (codling moth, plum moth, etc.) which are suitable only for detection and monitoring, these 3 chafer pests can be mass trapped with the VARb3 trap containing lure, and the damage can be decreased, since in this case we trap the adults, the damage-causing life form.

Surface derived from catches recorded in single traps in the network of the orchard:

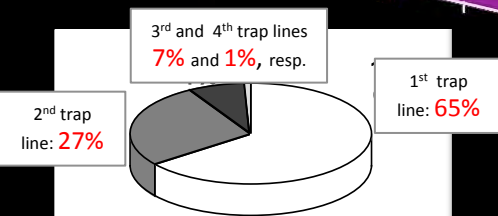


In a 2.4 ha peach orchard a network of traps was set up (traps spaced at distances of 15x20 m). Traps inside the field caught only small numbers of *Anomala* scarabs, most catches were recorded at the perimeters of the field. It was concluded that the chafers causing damage mostly come from outside the orchard. (Zákányszék, Hungary, 2000. Total caught : 3754 beetles. After: [Acta Zool. Acad. Sci. Hung. 48:297-303, 2002](#))



Foto: Tóth M.

All in all 92% of all catches originated from the 2 trap lines at the perimeter.



Consequently a double trap line was set up (traps spaced 7-10 apart) around the perimeter of the orchard. At this peach orchard with traps at the perimeter fruit damages did not exceed 5%, while in neighbouring orchards 35-40% fruit damages were recorded.

(After: [Acta Zool. Acad. Sci. Hung. 48:297-303, 2002](#)).

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