



Luring of the Vine weevil *Otiorhynchus sulcatus* F. (Coleoptera: Curculionidae)

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Introduction

The genus *Otiorhynchus* is of European origin and the species *O. sulcatus* (figure 2) is endemic to the temperate zone in Europe. Vine weevil (*Otiorhynchus sulcatus* F., Coleoptera: Curculionidae) is a serious pest in a number of ornamental plants and fruit crops in The Netherlands. A new idea of controlling these weevils is by the strategy of "lure and kill". First of all, luring agents were needed. Plant Research International (Wageningen University, The Netherlands) has characterized a few components in a plant-extract that were attractive in the laboratory and in field tests performed in the USA in 2008 in cooperation with the USDA (Van Tol, 2009). A few synthetic odours were tested and attractive, including "Odour 6". This poster deals with the testing of Odour 6 in The Netherlands in 2009:



Figure 1
The basket with or without
"Odour 6" placed at the top of a
plant.

Are the vine weevils attracted by Odour 6?

Materials and Methods

At a nursery in a field of *Taxus baccata*, we tested "Odour 6" in an experiment with four replicates.

Two treatments were tested, one with "Odour 6" and one without as a control treatment.

At 11 June (week1) the basket with or without "Odour 6" was placed at the top of a plant (figure 1). The nursery was sprayed twice with a crop protection agent, between the 1st and the 2nd week and between the 4th and the 5th week.



Figure 2
Otiorhynchus sulcatus

Results and discussion

These are the preliminary results.

One week after placing the odours in the field, there were no differences, but after two weeks more vine weevils were observed close to Odour 6 than to the control. This probably happened because the weevils needed some time to smell the odour and move towards it.

After spraying twice, the number of weevils dropped again.

References

Van Tol, R.W.H.M. (2009). Onderzoek bestrijding snuitkevers vordert gestaag. *De Boomkwekerij* 7, 10-11

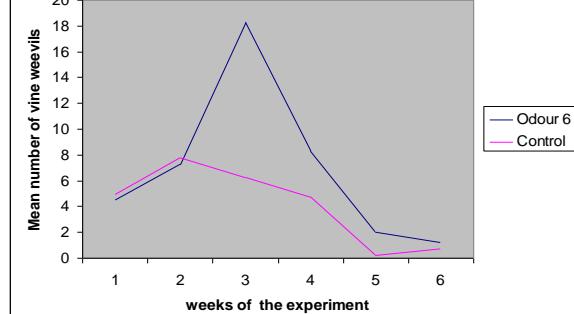


Figure 3
Mean number of vine weevils observed.
The odours were placed in the field in week 1.