

Effects of plant allelochemicals on host selection of thrips pests

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The onion thrips (*Thrips tabaci* Lindeman; Thysanoptera: Thripidae) is a serious pest in field cultures of leek and onion as well as in several protected crops in Austria. Plant allelochemicals such as monoterpenes have previously been demonstrated to be behaviourally active against many insect pests. We selected the monoterpenes linalool, eugenol and terpinen-4-ol for evaluating their antifeedant and oviposition deterrent properties, but also insecticidal effects against the onion thrips. In leaf disc bioassays we found linalool and eugenol both at 1 % and 0.1 % concentration to interfere with the feeding activity of the onion thrips and to reduce its reproduction success. Application of terpinen-4-ol showed no pronounced deterrent effects, but resulted in a slightly higher mortality of thrips at 1 % concentration. Assessment of the biological activity of monoterpenes against *T. tabaci* will contribute to the development of antifeedants and oviposition deterrents for use in both biological and Integrated pest management strategies.