

The Settling Response of *Acyrtosiphon pisum* (Harris) Alate Aphids to Host Plant Nitrogen

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Alate adults, *Acyrtosiphon pisum* (Harris) were given a choice between non-nodulated pea plants (*Pisum sativum* L.) supplied with one of four nitrate-N levels (0, 3, 15 and 30 mM). When whole plants were exposed to aphids for 7 days, the results indicated that settling response of alatae, and subsequently the reproduction of alighted aphids, increased as the level of N supply or the concentration of total soluble nitrogen of the leaves increased, with the exception of the highest N supply (30 mM N). However, the density of settled alatae (in terms of number per unit leaf area) increased as the level of N supply decreased, being greatest on N-deficient plants (0 mM N treatment) and lowest density on N-sufficient (15 mM N) or N-excess (30 mM N) plants. In a free-choice experiment, equal-sized leaf discs taken from the different N treatment were exposed to alate adults for 24h. The settling response of aphids was positively affected by leaf colour (yellowing), with the greatest number settled on yellow leaf discs (N-deficient plants) and fewest settled on green or dark green discs (N-sufficient and N-excess plants). Relationships between level of N supply, total soluble nitrogen concentration, total chlorophyll concentration, plant growth parameters and aphid abundance (number of alatae per plant) or density (number of alatae per unit leaf area, or per leaf disc) were established. The implications of results for integrated aphid management were discussed.



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Dear Gholamhossein Moravvej,

On behalf of The Organizing Committee of the VIIIth European Congress of Entomology we are pleased to inform you that your abstract entitled "***The Settling Response of Acyrthosiphon pisum (Harris) Alate Aphids to Host Plant Nitrogen***" has been accepted as an oral abstract.

We are looking forward to welcome you in Kuşadası.

For any supplementary information please contact Secretary General.
The official web site of the Congress is located at <http://ece2006.org.tr>

In the name of the organizing committee,
Sincerely Yours,

Prof. Dr. Seniz Kismali
Chair of VIIIth ECE