

# Effect of gramine in the resistance of barley seedlings to the aphid

## Rhopalosiphum padi

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Gramine (N,N-Dimethyl-3-aminomethylindole) content in various barley cultivars varied from 0 to 2.6 mmoles/kg fresh weight. Those cultivars which were lacking gramine were the most susceptible to the aphid *Rhopalosiphum padi* (L.). The population growth rate of *R. padi* negatively correlated with gramine content in leaves of barley seedlings. In addition, gramine incorporated in artificial diets decreased survival, amount of diet ingested and reproduction of aphids at concentrations similar to those found in plant leaves. Thus, it is suggested that gramine may be one of the factors responsible for the resistance of barley seedlings to *R. padi*.

Effet de la gramine sur la résistance de plantules de seigle des pucerons *Rhopalosiphum padi* La teneur de gramine (N,N-dimethyl-3-amino-methyl-indole) dans différentes cultures de seigle présente des variations comprises entre 0 et 2,8 mmoles/Kg (poids frais). Les variétés dépourvues de gramine sont plus sensibles à l'attaque des pucerons. Le taux d