

A screen of worldwide wheat cultivars for hydroxamic acid levels and aphid antixenosis

NICOL, D.

COPAJA, S. V.

WRATTEN, S. D.

NIEMEYER, H. M.

In a screen of seedlings of a worldwide range of 47 cultivars of *Triticum* (mainly *T. aestivum*) the concentration of the hydroxamic acid DIMBOA ranged between 1 and 8 mmol/kg fresh wt. In a bioassay in which alatae of the aphid *Sitobion avenae* were released among replicated test seedlings, there were highly significant correlations between aphid preference and DIMBOA levels in the seedlings. The value of these results in work leading to the production of aphid-resistant cultivars is discussed. Copyright © 1992, Wiley Blackwell. All rights reserved