

Chemical Basis for the Antifeedant Activity of Natural Hydroxamic Acids and Related Compounds

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Natural hydroxamic acids and related compounds derived from the 1,4-benzoxazin-3-one structure show antifeedant activity against the aphid *Rhopalosiphum padi*. This antifeeding activity is based on the electrophilic character of the hydroxamic acid function, the opening of the hemiacetal function and the lipophilic character of the molecule. In addition, the antifeedant activity of the aqueous extracts of different tissues of *Acanthus mollis* (Acanthaceae) was determined. The activity observed is attributed to the presence of 2,4-dihydroxy-1,4-benzoxazin-3-one in the extracts.