

Aminophosphonate-Induced Changes of Betacyanine and Ionic Efflux

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Betacyanine and ionic leakage from red beet (*Beta vulgaris ssp. L. rapacea*) roots and lilac (*Syringa vulgaris L.*) leaves under the influence of new aminophosphonates were studied by spectroscopic and conductometric methods. It was found that the leakage of dye or electrolytes depended both on the concentration of the compounds used and their structural features. The results compared to those obtained for the well known herbicide Buminafos[®] (dibutyl 1-butylamino-1-cyclohexanephosphonate) enabled to conclude that some of the compounds studied exhibited comparable or better activity than this herbicide. That makes them potentially good herbicides. It is possible that the effects observed are the result of action on cell membranes of the tissues used. The possible role of the structural features of aminophosphonates in this action is discussed.