

SHORT COMMUNICATION

Interactions in allelopathic effects of *Raphanus raphanistrum* L.

ALEXANDRA S. DIAS and L.S. DIAS*

Chemical Ecology Unit, Centre of Ecology and Environment,
Universidade de Évora, Ap. 94, 7002-554 Évora, Portugal.
E. Mail: lsdias@uevora.pt

(Received in revised form: January 15, 2007)

ABSTRACT

Water extracts of leaves and stems of wild radish tested separately and jointly affected the germination and early growth of wheat and oats. Interaction of effects, antagonistic and synergic, between leaves and stems extracts were generalized and established using the Loewe model without knowing the isoeffective concentrations. The subsequent use of mechanism-dependent models evidenced multiplicative (in wheat) and additive (in wheat and oats) interactions suggesting that different phytoactive compounds of wild radish are involved in these responses and may act on wheat and oats either at distinct targets by different processes or have similar modes of action.

Keywords: Additive model, antagonism, Loewe model, multiplicative model, oats, synergy, wheat, wild radish.

Pedidos de cópia desta publicação para Luís Silva Dias, Departamento de Biologia, Universidade de Évora, Ap. 94, 7002-554 Évora, Portugal ou, de preferência, para lsdias@uevora.pt.

Reprint requests to Luís Silva Dias, Departamento de Biologia, Universidade de Évora, Ap. 94, 7002-554 Évora, Portugal or preferably to lsdias@uevora.pt.