EFFECTS OF PRE AND POSTEMERGENCE HERBICIDES IN VEGETATIVE GROWTH AND SUSCEPTIBILITY TO *ROSELLINIA NECATRIX* OF HASS GRAFTED NURSERY PLANTS

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R.M. Pérez Jiménez[1], T. Zea[1], J. M. Hermoso[2], R. Moreno[1] and J.M. Farré[1]

[1] C.I.F.A. de Málaga. Cortijo de la Cruz. 29140 Churriana. Málaga. Spain
 E-mail: patologia@olinet.es
[2] Estación Experimental La Mayora. C.S.I.C. 29750 Algarrobo Costa. Málaga. Spain

Over a period of two years vegetative growth and susceptibility to *Rosellinia necatrix* (Hart) were studied in potted Hass/Topa-Topa plants. The preemergence herbicides oxyfluorfen, isoxaben, terbumetone + terbutilazine, oryzaline, trifluraline and simazine and the contact-translocation glyphosate, sulfosate, ammonium glufosinate and paraquat + diquat, were all soil applied. The growing media was vapour desinfected soil and peat moss. After one year half the plants received 20 g of dry sterilised manure and a 4 cm thick almond shells mulch. Shoot growth up to grafting time was biggest for the control trees but differences were significant (p<0.05) only for isoxaben, trifluralin and terbumetone + terbutilazine. For the whole experiment their trunk caliber was smaller than control but differences were not statistically significant. After the final inoculation with *R. necatrix*, in the plants without manure-mulch only the trees with isoxaben, terbumetone – terbutilazine and oryzaline showed a logistic death rate significantly higher than control. Only oxyflourfen caused a quick development of symptons after inoculation and therefore could not be included in the same logistic model. Rates for paraquat + diquat were significantly smaller than control. Simazine had also slightly, but not significantly, lower rates. The other treatments were similar to control. With the manure-mulch all treatments had rates similar to control except trifluraline that had it significantly higher. For a given herbicide death rates were similar for unfertilized and manure-mulched trees. Only trifluraline had a smaller rate in manure-mulched trees.