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BACTERIOLOGIA

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Response of geranium inoculated with different isolates of *Ralstonia solanacearum*
(Reação de gerânio inoculado com diferentes isolados de *Ralstonia solanacearum*)

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Geranium (*Pelargonium* sp.) is an important host of *Ralstonia solanacearum* (Rs) because it is an efficient vehicle for bacteria long-distance dissemination through latently infected cuttings. The objective of this work was to preliminarily test the response of one geranium genotype after challenging it with 10 strains of Rs from the Embrapa's collection, selected by their diversity based on their hosts of origin, state, biovar and date of the isolation. Theses strains were cultivated for 48h at 28°C in Kelman's medium. Isolated colonies were used to inoculate the 30 cm tall plants by perforating their crown regions (5 cm from soil) with a sterile toothpick contaminated with each strain. Susceptible tomato seedlings were inoculated the same manner. Inoculated plants were taken to a growth chamber with 30°C and high humidity for six days, with daily evaluations. Slight symptoms were firstly noticed three days after inoculation with strains of race 1, biovars 1 and 3. Only one out of six isolates of race 3/biovar 2 caused symptoms by then. After six days, all plants were transferred to a greenhouse (15 to 30°C) were wilting evolved to death. All tomato seedlings wilted and died, indicating that all isolates were virulent. Three from the group of six R3Bv2 isolates wilted the geranium plants, with two producing a small amount of bacterial ooze from their stems. No patterns on the incidence levels were found that would explain interactions between biovar, host or local of origin; inoculation with older isolates, however, resulted in a lower incidence over the geranium plants. At the end of the experiment, 26 days after inoculation, an oozing test was performed, confirming that all isolates were capable of infecting geranium plants under highly favorable conditions. Therefore, less virulent isolates, like the R3Bv2, and/or less favorable environments for disease manifestation increases the chances of Rs dissemination though latently infected geranium cuttings.

Apoio: FAPEMIG.