

INFECTIVITY OF MELOIDOGYNE JAVANICA LARVAE

FROM SOIL AT pH 4.2

Capacité d'infestation des larves de 2<sup>e</sup> stade de Meloidogyne javanica après traitement dans un sol sec à pH 4.2.  
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Collection de Référence

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Infectivity of Meloidogyne javanica larvae from soil at pF 4.2

Meloidogyne javanica larvae from Senegal, Africa less than 24 hours old were obtained directly from six-week-old egg masses and were exposed to the following treatments:

1. Half of the larvae were pipetted onto sandy soil (sand 85.06%, silt 6.98%, clay 7.96%) and then dried using the de Guiran process to permanent wilting point (pF 4.2) and a moisture content of 0.5%.

2. The other half of the larvae were suspended in a phosphate buffer (pH 7.2) in a ratio of 1:5 H<sub>2</sub>O.

The larvae were stored under these conditions for 14 and 28 days at 28° C. The controls for each harvest date were fresh larvae hatched from egg masses in a 24-hour period. At each harvest date, 10 subsamples with 25 active larvae obtained from Baermann funnel extraction were inoculated on young tomato plants cultivar Roma (15 days old) susceptible to Meloidogyne javanica. After five days in a growth chamber at 28° C, the tomato roots were stained with cotton blue using the de Guiran process to count the number of larvae that had entered each tomato plant. The mean penetration was 17.4 larvae for the controls, 16.6, 16.0 for the 14- and 28-day soil treatment and 8.6, 0.0 for the 14- and 28-day buffer treatments.

Soil dried to the permanent wilting point did not decrease the infectivity of active M. javanica larvae for at least 28 days when compared with the controls and with larvae stored in a phosphate buffer.

These data suggest that M. javanica larvae are capable of undergoing quiescence in soil and retain infectivity for at least 28 days.

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