



II.5. RESPONSE OF POTENTIAL CUCURBIT ROOTSTOCKS AGAINST *MELOIDOGYNE* SPP.

M. Munera¹, A. Giné¹, M. Pocurull¹, B. Picó², C. Gisbert², F.J. Sorribas¹

¹Dept. Enginyeria Agroalimentària i Biotecnologia, Universitat Politècnica de Catalunya, Esteve Terradas 8, Edifici D4, 08860 Castelldefels, Barcelona, Spain; maria.munera@estudiant.upc.edu; ariadna.gine@estudiant.upc.edu; miriam.pocurull@estudiant.upc.edu; francesc.xavier.sorribas@upc.edu

²Instituto de Conservación y Mejora de la Agrodiversidad (COMAV-UPV), Universitat Politècnica de València, Camino de Vera s/n, 46022 Valencia, Spain; mpicosi@btc.upv; cgisbert@btc.upv

The *Cucurbita* hybrids, usually used as cucurbit rootstocks, are susceptible to *Meloidogyne*. Its cultivation increases the nematode population densities at similar levels than ungrafted cucumber or melon crops, and higher levels than watermelon. Then, resistant cucurbit rootstocks are needed to be included in integrated nematode management strategies. The response of two *Cucumis metuliferus*, three *Citrullus lanatus* var. *citroides*, and one *Citrullus colocynthis* accessions against *M. incognita* and *M. javanica* was assessed in pot trials. Cucumber cv. Dasher II and watermelon cv. Sugar Baby were included as controls for comparison. At the end of the experiments, the reproduction index (IR) was calculated as percent of number of eggs per plant on each accession of *C. metuliferus* or *Citrullus* sp. relative to those produced on cucumber or watermelon, respectively. The response of each accession was classified according to Hadisoeganda and Sasser (1982). Both *C. metuliferus* accessions responded as highly resistant (IR between 1 and 4); two out of the three accessions of *C. lanatus* var. *citroides* as highly resistant (IR between 3 and 7), and one as moderately resistant (IR = 9 against *M. incognita*, IR = 21 against *M. javanica*). The *C. colocynthis* accession responded as moderately resistant (IR = 34).