GRAFTING MELONS ONTO POTENTIAL CUCUMIS SPP. ROOTSTOCKS

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Cucumis melo is an economically important crop. Its culture is hampered by different types of soil stresses. Grafting melons onto different resistant cucurbits belonging to the genera, Cucurbita, Lagenaria, Luffa, etc. have been successfully used to avoid these problems. However, melon quality has been negatively modified as a consequence of grafting. In general, variation in fruit shape, seed cavity and sugar content have been observed. The use of rootstocks more genetically closer to the melon scions could be useful to obtain fruits with better quality from melon grafted plants. Two new potential Cucumis spp. rootstocks were assayed: a) a hybrid between a commercial melon (Cucumis melo subspecies melo var inodorus market class Piel de sapo) and one exotic accession (Cucumis melo subspecies agrestis var conomon) with resistance to Monosporascus cannonballus, the causal agent of melon vine decline, and some levels of tolerance to Fusarium oxysporum f sp. melonis race 1.2, that causes Fusarium wilt, and b) a multiresistant Cucumis metuliferus which is highly tolerant to Fusarium 1.2 and resistant to Meloidogyne. Grafting compatibility of these selected genotypes with commercial melons was evaluated. Modification of plant structure and fruit shape was not observed in our preliminary assays. However, all grafted plants displayed a higher vigour and earlier flowering than ungrafted plants.