



Beneficial Microbes to Optimize pest control in Sustainable Tomato production

BeMOST HFRI-FM17-50

D1.2 Plant-mediated effects of selected BM (fungi/bacteria) on plant performance

Summary

In the context of the WP1 objectives, D1.2 reports on the plant-mediated effects of microbes inducing tomato resistance against BeMOST herbivores, on plant performance. Selected beneficial microbes with plant-protecting capabilities were included in our experiments with the aim to assess the plant-mediated effects of the beneficial microbes on plant performance indices. In total, we tested 16 strains (fungi/bacteria) in plants infested with herbivorous species belonging to the five BeMOST arthropod groups. As with D1.1, plants were inoculated with beneficial microbes and then infested with a standard number of individuals, depending on the herbivore species under study. The performance of tomato plants was assessed by recording the dry weight of the above- and belowground plant parts of microbe-inoculated control and herbivore-infested plants. Overall, for the period of our experiment no significant effects were recorded in the stem and root weight of tomato plants inoculated with the different microbes and infested with the BeMOST herbivores.

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