Behaviour of severed rhizomorphs of Armillaria mellea and A. gallica in growing media

Armillaria spp. (honey fungus) are root pathogens and the primary cause of death and decline of woody plants in UK gardens. A 4-year survey found *A. mellea* and *A. gallica* to be the two most common species. Experiments have been designed to further our understanding of their pathogenicity. Experiments looking at the maximum temperature at which rhizomorphs or inoculum plugs could survive demonstrated that *A. gallica* was able to tolerate higher temperatures than *A. mellea*; rhizomorphs of both species were more sensitive to dry heat than mycelium embedded in hazel plugs. Rhizomorphs are produced by *Armillaria* to travel from plant to plant but their role in spreading the disease once severed is not known. In order to test this, rhizomorphs of *A. mellea* and *A. gallica* were severed and their growth and viability were examined. Results collected over 3 trials showed that severed rhizomorphs of both species did not grow in length, but could survive up to 6 months (Figure 1.). Their survival was low (less than 5%) and *A. gallica* survived longer than *A. mellea*. This suggests that in the absence of woody material the risk from severed rhizomorphs is not very significant.

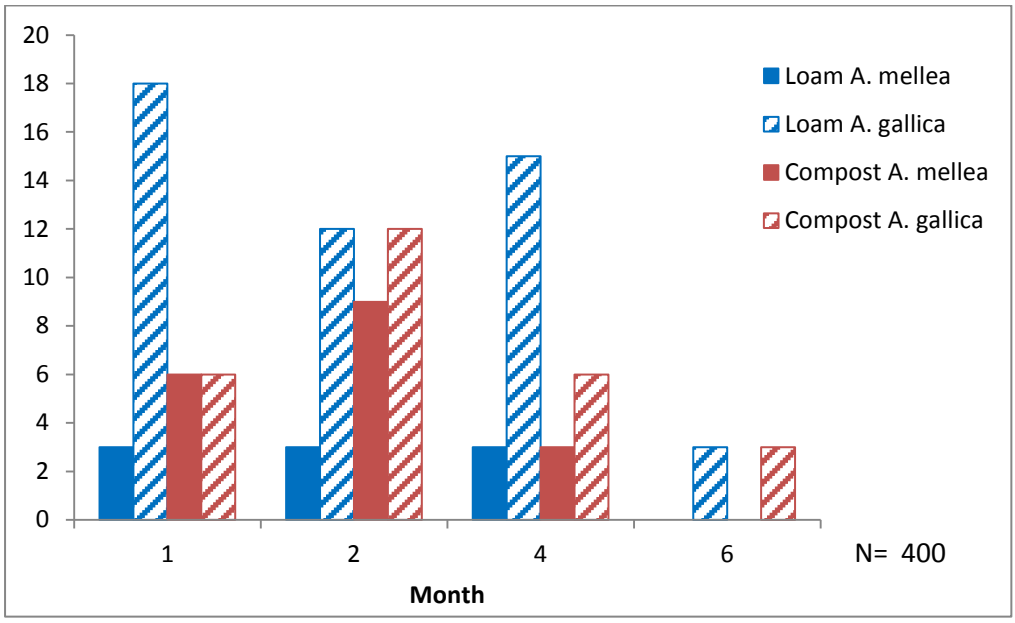

Figure 1: Percentage of viable *Armillaria* isolates (*A. mellea*; *A. gallica*) after 1-6 months incubation in either loam ■ or compost ■.