

Fungi play a home match

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For sports teams it has been shown that they often perform better when they play a match in their home stadium than when they play away from it. Similar processes go on underground! When plants drop their dead remnants (i.e., litter) on the ground year after year, decomposer organisms in the soil may become specialized to break down the material of the plant above them, resulting in accelerated decomposition. Although it has been shown that such home-field advantage effects occur, we do not know whether this really means that soil decomposer communities are different between home and away sites. In this study we investigated to what extent fungal decomposer communities are shaped by soils, litters and by fungi already present on dead leaves when they fall to the ground. In addition, we unraveled how fungal communities contribute to home-field advantage effects. We found that litter types had unique fungal communities, which are largely shaped by fungi present on recently senesced leaves. When these initial decomposers were absent, fungi colonized leaf litter from the soil and this colonization was not different between litter types. We also found that a group of abundant fungi was important in explaining home-field advantage effects on litter breakdown. Our study indicates that leaf litters can have unique decomposer communities which play a home match. However,



specific groups of decomposer organisms, rather than the whole community, may be important in determining the outcome of the match.