



## **Grazing preference and utilization of soil fungi by *Folsomia candida* (Collembola)**

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Soil fungi are important food resources for soil fauna. Here we ask whether the collembolan *Folsomia candida* shows selectivity in grazing between four saprophytic fungi (*Penicillium chrysogenum*, *Penicillium expansum*, *Absidia glauca*, and *Cladosporium herbarum*), whether grazing preference corresponds to effects on collembolan reproduction, and whether the effects of fungi on grazing and reproduction depends on the fungal substrate, which included three kinds of litter (*Alnus glutinosa*, *Salix caprea*, and *Quercus robur*) and one kind of agar (yeast extract). On agar, *Cladosporium herbarum* and *Absidia glauca* were the most preferred fungi and supported the highest collembolan reproduction. On fungal-colonized litter, grazing preference was more affected by litter type than by fungal species whereas collembolan reproduction was affected by both litter type and fungal species. On fungal-colonized litter, the litter type that was most preferred for grazing did not support the highest reproduction, i.e. there was an inconsistency between food preference and suitability. Alder and willow were preferred over oak for grazing, but alder supported the least reproduction.