



**Supplementary figure S5.** Microbial composition of MEP-sprayed soils (a, b) and the insect gut (c, d) investigated by deep sequencing, presented at the genus-level (a, c) and *Burkholderia*-group level (b, d). Insects associated with MEP-degrading bacteria were investigated. 6CS indicates control soils with 6 times spraying with distilled water, instead of MEP.