

Interactive comment on “Low molecular weight organic anions (carboxylates) increase microbial activity and alter microbial community composition in uncontaminated and diesel contaminated soil” by B. C. Martin et al.

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Response to referee #2

We thank the reviewer for their useful and positive comments.

You have raised a similar point as referee #1, in that a variety of compounds should have been tested (i.e. not just carboxylates). However, previous work in this area has already been conducted using a mixture of root exudate compounds (Joner and Leyval, 2003; Miya and Firestone, 2001; Xie et al., 2012). We instead attempted to focus on a single group of exudates, as these exudates have been studied extensively for their

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potential role in plant nutrient acquisition and metal detoxification, but impact on the soil microbial community has received less attention (Pang et al., 2010; Pearse et al., 2006; Shane and Lambers, 2005). As far as we are aware, there are no studies examining the biodegradation of carboxylate compounds in polluted soils, and we therefore agree with you that it is still a useful contribution to this area of research.

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