

Interactive comment on “Knowledge needs, available actions and future challenges in agricultural soils” by G. Key et al.

B. Rawlins

bgr@bgs.ac.uk

Received and published: 15 May 2016

General Comment

This article is a useful contribution to the current evidence relating to a range of soil management practices in agricultural systems. My one concern is whether ‘enhancing soil health’ is the most appropriate paradigm in which to frame the study. In their

C1

recent paper on the dimensions of soil security (McBratney *et al.*, 2014) stated that, ‘there is little value in talking about the health of any given soil, unless there is an understanding of how ‘healthy’ it can actually be. Unlike capability, the condition [one of their five dimensions of soil security] of a soil is contemporary and is measured on a short-term management time scale’. [I would like to note here that I am not an author, nor did I contribute to, the paper on the dimensions of soil security]. The definitions of ‘soil quality’ and ‘soil health’ lack the wider framework of the dimensions of soil security and I would argue that your study largely addresses the ‘soil condition’ dimension, and it would have been better to frame it in this context which provides a more comprehensive framework for the discussion of the state of soil systems.

Reference: Alex McBratney, Damien J. Field, Andrea Koch, The dimensions of soil security, *Geoderma*, Volume 213, January 2014, Pages 203-213, ISSN 0016-7061
<http://dx.doi.org/10.1016/j.geoderma.2013.08.013>.

C2