Supplementary Material

Root morphological traits that determine phosphorus-acquisition efficiency and critical external phosphorus requirement in pasture species

Rebecca E. Haling^{A,D}, Zongjian Yang^A, Natalie Shadwell^A, Richard A. Culvenor^A, Adam Stefanski^A, Megan H. Ryan^B, Graeme A. Sandral^C, Daniel R. Kidd^B, Hans Lambers^B and Richard J. Simpson^A

^ACSIRO Agriculture, GPO Box 1600, Canberra, ACT 2601, Australia.

^BSchool of Plant Biology and Institute of Agriculture, The University of Western Australia, Crawley, WA 6009, Australia.

^CDepartment of Primary Industries, Wagga Wagga Agricultural Institute, Pine Gully Road, Wagga Wagga, NSW 2650, Australia.

^DCorresponding author. Email: rebecca.haling@csiro.au

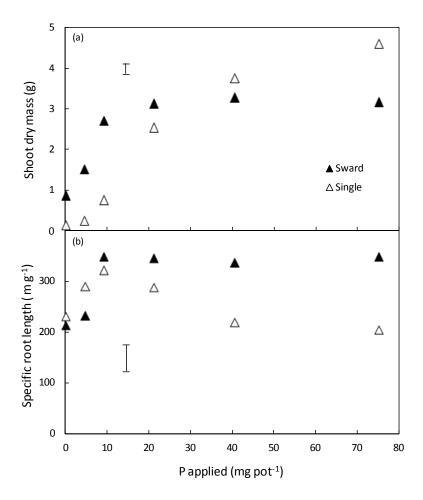


Fig. S1. (a) Shoot dry mass and (b) specific root length in topsoil of *Trifolium subterraneum* (cv. Seaton Park) grown with phosphorus (P) applied to the topsoil either in a sward (50 mg viable seed per pot; reflective sleeves raised daily to equal plant height) or as single plants (without reflective sleeves). Experimental conditions were otherwise as described in the Materials and methods of the main experiment. Bars show LSD for two-way interaction of P × plant density (P<0.05; n=3). The co-efficients of determination (R²) for specific root length and average root diameter between plants grown in a sward or as single plants was 0.62 and 0.61, respectively.