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Poulton, P. R., Johnston, A. E. and White, R. P. 2022. Response of three cereal crops in continuous arable or ley-arable rotations to fertiliser nitrogen and soil nitrogen at Rothamsted's Woburn Ley-arable experiment. *Soil Use and Management.* https://doi.org/10.1111/sum.12872

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FIGURE 1 The response to fertiliser N by three cereals grown as the first test crop, (a) winter wheat, and the second test crop, (c) spring barley or (e) winter rye following different rotations. The individual response curves were then brought into coincidence with the AB rotation by appropriate vertical and horizontal shifts: (b) winter wheat, (d) spring barley, (f) winter rye. The rotations were (\Diamond) all-arable, AB; (\Box) arable with fallows, AF; (+) 3-yr grass ley with N, Ln3; (x) 8-yr grass ley with N, Ln8; (\bigstar) 3-yr grass/clover ley, Lc3; (*) 8-yr grass/clover ley.

FIGURE 2 The response by three cereals to % N in soil (0-25 cm). Yields of (a) wheat grain without fertiliser N compared to (b) maximum yield with fertiliser N; (c) barley grain without fertiliser N compared to (d) maximum yield with fertiliser N; (e) rye grain without fertiliser N compared to (f) best yield with fertiliser N. Yields without fertiliser N (\bullet); with fertiliser N (\square).