

Adrian C Newton - Publication list

Last updated: June 23, 2021

Refereed publications:

128. Jeger M, Beresford R, Bock C, Brown N, Fox A, **Newton AC**, Vicent A, Xu X, Yuen J, 2021. Global challenges facing plant pathology: multidisciplinary approaches to meet the food security and environmental challenges in the mid-21st century. CABI Agriculture and Bioscience (in press).
127. Brooker RW, Hewison RL, Mitchell C, **Newton AC**, Pakeman RJ, Schöb C, Karley AJ, 2021. Does crop genetic diversity support positive biodiversity effects under experimental drought? Basic and Applied Ecology doi.org/10.1016/j.baae.2021.05.001
126. Weih M, Karley AJ, **Newton AC**, Kiær L, Scherber C, Rubiales D, Adams E, Ajal J, Brandmeier J, Pappagallo S, Villegas Fernández A, Reckling M, Tavoletti S, 2021. Grain yield stability of cereal-legume intercrops greater than sole crops in more productive conditions. Agriculture 11, 255. <https://doi.org/10.3390/agriculture11030255>
125. Yassin M, Ton J, Rolfe SA, Valentine T, Cromeey M, Holden N, **Newton AC**, 2021. The rise, fall and resurrection of chemical induced resistance agents. Pest Management Science <https://doi.org/10.1002/ps.6370>
124. Cope JE, Russell J, Norton GJ, George TS, **Newton AC**, 2021. Identifying potential novel resistance to the foliar disease 'Scald' (**Rhynchosporium commune**) in the Scottish barley landrace Bere (*Hordeum vulgare* L.). Journal of plant diseases and protection doi.org/10.1007/s41348-021-00470-x
123. Carrillo-Rechea J, **Newton AC**, Quilliam RS, 2021. Using seed respiration as a tool for calculating optimal soaking times for 'on-farm' seed priming of barley (*Hordeum vulgare*). Seed Science Research. <https://doi.org/10.1017/S0960258521000039>
122. Rivington, Mike; King, Richard; Duckett, Dominic; Ianetta, Pete; Benton, Tim; Burgess, Paul; Hawes, Cathy; Wellesley, Laura; Polhill, John; Aitkenhead, Matt; Lozada-Ellison, Luz-Maria; Begg, Graham; Williams, Adrian; **Newton, Adrian**; Lorenza-Arribas, Altea; Neilson, Roy; Watts, Charlotte; Harris, Jim; Loades, Kenneth; Stewart, Derek; Wardell-Johnson, Douglas; Gandossi, Gianna; Udugbezi, Emmanuel; Hannam, Jacqueline; Keay, Caroline, 2021. UK food and nutrition security during and after the COVID-19 pandemic. Nutrition Bulletin 46, 88-97. <https://doi.org/10.1111/nbu.12485>
121. **Newton AC**, Hawes C, Hackett CA, 2021. Adaptation of winter barley cultivars to inversion and non-inversion tillage for yield and rhynchosporium symptoms. Agronomy 2021, 11, 30. <https://dx.doi.org/10.3390/agronomy11010030>
120. Brooker RW, George T, Homulle Z, Karley AJ, **Newton AC**, Pakeman RJ, Schöb C, 2021. Facilitation and Biodiversity Ecosystem Function (BEF) relationships in crop production systems and their role in sustainable farming. Journal of Ecology 109, 2054–2067 <https://dx.doi.org/10.1111/1365-2745.13592>
119. Herman NC, Berghuijs MW, Weih M, van der Werf W, Karley AJ, Adam E, Fernández AV, Kiær LP, **Newton AC**, Scherber C, Tavoletti S, Vico G, 2021. Calibrating and testing APSIM for simulating growth, biomass, and yield of spring wheat and faba bean as sole crops and intercrops across Europe. Field Crop Research 264. <https://doi.org/10.1016/j.fcr.2021.108088>
118. Brown JL, Stobart R, Hallett PD, Morris NL, George TS, **Newton AC**, Valentine TA, McKenzie BM, 2021. Variable impacts of reduced and zero tillage on soil carbon storage across 4-10 years of UK field experiments. Journal of Soils and Sediments. <https://doi.org/10.1007/s11368-020-02799-6>.

117. De Vega D, Holden NJ, Hedley P, Morris J, Luna E, **Newton AC**, 2020. Chitosan primes defence mechanisms including expression of *Avr9/Cf-9* rapidly elicited genes. *Plant Cell and Environment* 44, 290-303. <https://doi.org/10.1111/pce.13921>
116. **Newton AC.**, Valentine TA, McKenzie BM, George TS, Guy DC, Hackett CA, 2020. Identifying spring barley cultivars with differential response to tillage. *Agronomy* 10, 686; <https://doi.org/10.3390/agronomy10050686>
115. **Newton AC**, Guy DC, 2020. Assessing effects of crop history and soil amendments on yields of subsequent crops. *Agricultural Science* 11, 514-527. <https://doi.org/10.4236/as.2020.115032>
114. Cope JE, Russell J, Norton GJ, George TS, **Newton AC**, 2020. Assessing the variation in manganese use efficiency traits in Scottish barley landrace Bere (*Hordeum vulgare* L.) *Annals of Botany* 126, 289-300. <https://doi.org/10.1093/aob/mcaa079>
113. **Newton AC**, Guy DC, Hackett CA, 2019. The grain and straw yield in cultivar mixtures. *Journal of Agricultural Science* 157 (2), 117-128. doi: <https://doi.org/10.1017/S0021859619000364>
112. Pakeman R, Brooker R, Karley A, **Newton AC**, Mitchell C, Hewison R, Pollenus J, Guy DC, Schoeb C, 2020. Increased crop diversity reduces the functional space available for weeds. *Weed Research* 60, 121-131.
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108. Holland JE, Bennett A, **Newton AC**, White P, McKenzie B, George T, Pakeman R, Bailey J, Fornara D, Hayes R, 2017. Liming impacts on soils, plants and biodiversity in the UK: A review. *Science of the Total Environment* 610-611, 316-332. doi.org/10.1016/j.scitotenv.2017.08.020
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106. Schöb C, Hortal S, Karley AJ, Morcillo L, **Newton AC**, Pakeman RJ, Powell JR, Anderson IC, Brooker RW, 2017. Species but not genotype diversity strongly impacts the establishment of rare colonisers. *Functional Ecology* 31, 1462-1470. doi: 10.1111/1365-2435.12848
105. Vasileiadis VP, Dachbrodt-Saaydeh S, Kudsk P, Colnenne-David C, Leprince F, Holb IJ, Kierzek R, Furlan L, Loddo D, Melander B, Jørgensen LN, A. **Newton AC**, Toque C, van Dijk W, Lefebvre M, Benezit M, Sattin M, 2017. Sustainability of European winter wheat- and maize-based cropping systems: economic, environmental and social ex-post assessment of current and IPM-based systems. *Crop Protection* 97, 60-69. doi: dx.org/10.1016/j.cropro.2016.11.002
104. Lechenet M, Deytieux V, Antichic D, Aubertot J-N, Bàrberi B, Bertrand M, Cellier V, Charles R, Colnenne-David C, Dachbrodt-Saaydeh S, Debaeke P, Doréi T, Farcy P, Fernandez-Quintanilla C, Grandeau G, Hawes C, Jouy L, Justes E, Kierzek R, Kudsk P, Lamichhane JR, Lescourret F, Mazzoncini M, Melander B, Messéan A, Moonen AC, **Newton AC**, Nolot JM, Panozzo S, Retaureau P, Sattin M, Schwarz J, Toqué C, Vasileiadis VP, Munier-Jolain N,

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103. **Newton AC**, 2016. Exploitation of diversity within crops – the key to disease tolerance? *Frontiers in Plant Science* 7: 665. doi: 10.3389/fpls.2016.00665
- 102 Kaczmarek M, Piotrowska MJ, Fountaine JM, Gorniak K, McGrann GRD, Armstrong A, Wright KM, **Newton AC**, Havis ND, 2016. Infection strategy of *Ramularia collo-cygni* and development of Ramularia leaf spot on barley and alternate graminaceous hosts. *Plant Pathology* 66, 45-55. doi: 10.1111/ppa.12552.
101. Hopkins DW, Wheatley RE, Coakley CM, Daniell TJ, **Newton AC**, Neilson R, 2016. Soil carbon and nitrogen and barley yield responses to repeated additions of compost and slurry. *Journal of Agricultural Science* 155, 141-155. doi: 10.1017/S0021859616000307
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95. Looseley M, Keith R, Guy D, Barral-Baron G, Thirugnanasambandam A, Harrap D, Werner P, **Newton AC**, 2014. Genetic mapping of resistance to *Rhynchosporium commune* and characterisation of early infection in a winter barley mapping population. *Euphytica* DOI 10.1007/s10681-014-1274-2
94. Schöb C, Kerle S, Karley AJ, Morcillo L, Pakeman RJ, **Newton AC**, Brooker RW, 2015. Intra-specific genetic and composition modify species-level diversity-productivity relationships. *New Phytologist* 205, 720-730.
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- 83 Looseley ME, **Newton AC**, Atkins SD, Fitt BDL, Fraije B, Thomas WTB, Keith R, Lynott J, Harrap D, 2012. Genetic basis of control of *Rhynchosporium secalis* infection and symptom expression in barley. *Euphytica* 184, 47-56.
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