

# Publications for Malcolm Possell

## 2018

Gharun, M., Possell, M., Vervoort, R., Adams, M., Bell, T. (2018). Can a growth model be used to describe forest carbon and water balance after fuel reduction burning in temperate forests? *Science of the Total Environment*, 615, 1000-1009. <a href="http://dx.doi.org/10.1016/j.scitotenv.2017.09.315">[More Information]</a>

Mella, V., Possell, M., Troxell-Smith, S., McArthur, C. (2018). Visit, consume and quit: Patch quality affects the three stages of foraging. *Journal of Animal Ecology*, 87(6), 1615-1626. <a href="http://dx.doi.org/10.1111/1365-2656.12882">[More Information]</a>

## 2017

Wang, H., Van Eyk, P., Medwell, P., Birzer, C., Tian, Z., Possell, M. (2017). Effects of Oxygen Concentration on Radiation-Aided and Self sustained Smoldering Combustion of Radiata Pine. *Energy and Fuels*, 31(8), 8619-8630. <a href="http://dx.doi.org/10.1021/acs.energyfuels.7b00646">[More Information]</a>

Gharun, M., Possell, M., Jenkins, M., Poon, L., Bell, T., Adams, M. (2017). Improving forest sampling strategies for assessment of fuel reduction burning. *Forest Ecology and Management*, 392, 78-89. <a href="http://dx.doi.org/10.1016/j.foreco.2017.03.001">[More Information]</a>

Gharun, M., Possell, M., Bell, T. (2017). Modelling feedback between fuel-reduction burning and forest carbon and water balance in eucalypt forests. *Bushfire and Natural Hazards CRC & AFAC annual conference 2017*, Sydney: Bushfire and Natural Hazards CRC.

Gharun, M., Possell, M., Bell, T., Adams, M. (2017). Optimisation of fuel reduction burning regimes for carbon, water and vegetation outcomes. *Journal of Environmental Management*, 203, 157-170. <a href="http://dx.doi.org/10.1016/j.jenvman.2017.07.056">[More Information]</a>

## 2016

Wang, H., Van Eyk, P., Medwell, P., Birzer, C., Tian, Z., Possell, M. (2016). Identification and Quantitative Analysis of Smoldering and Flaming Combustion of Radiata Pine. *Energy and Fuels*, 30(9), 7666-7677. <a href="http://dx.doi.org/10.1021/acs.energyfuels.6b00314">[More Information]</a>

## 2015

Possell, M., Jenkins, M., Bell, T., Adams, M. (2015). Emissions from prescribed fires in temperate forest in south-east Australia: Implications for carbon accounting. *Biogeosciences*, 12(1), 257-268. <a href="http://dx.doi.org/10.5194/bg-12-257-2015">[More Information]</a>

Wang, H., Medwell, P., Birzer, C., Van Eyk, P., Tian, Z., Possell, M. (2015). Investigation of smoldering combustion of biomass fuel. *Australian Combustion Symposium 2015*, Melbourne, Victoria: The Combustion Institute Australia & New Zealand.

## 2014

Morfopoulos, C., Sperlich, D., Penuelas, J., Filella, I., Llusia, J., Medlyn, B., Niinemets, U., Possell, M., Sun, Z., Prentice, I. (2014). A model of plant isoprene emission based on available reducing power captures responses to atmospheric CO<sub>2</sub>. *New Phytologist*, 203(1), 125-139. <a href="http://dx.doi.org/10.1111/nph.12770">[More Information]</a>

Ryan, A., Hewitt, C., Possell, M., Vickers, C., Purnell, A., Mullineaux, P., Davies, W., Dodd, I. (2014). Isoprene emission protects photosynthesis but reduces plant productivity during drought in transgenic tobacco (*Nicotiana tabacum*) plants. *New Phytologist*, 201(1), 1-12. <a href="http://dx.doi.org/10.1111/nph.12477">[More Information]</a>

## 2013

Morfopoulos, C., Prentice, I., Keenan, T., Friedlingstein, P., Medlyn, B., Penuelas, J., Possell, M. (2013). A unifying conceptual model for the environmental responses of isoprene emissions from plants. *Annals of Botany*, 112(7), 1223-1238. <a href="http://dx.doi.org/10.1093/aob/mct206">[More Information]</a>

Possell, M., Bell, T. (2013). The influence of fuel moisture content on the combustion of Eucalyptus foliage. *International Journal of Wildland Fire*, 22(3), 343-352. <a href="http://dx.doi.org/10.1071/WF12077">[More Information]</a>

Possell, M., Loreto, F. (2013). The Role of Volatile Organic Compounds in Plant Resistance to Abiotic Stresses: Responses and Mechanisms. In Ulo Niinemets, Russell K. Monson (Eds.), *Biology, Controls and Models of Tree Volatile Organic Compound Emissions*, (pp. 209-235). Dordrecht: Springer. <a href="http://dx.doi.org/10.1007/978-94-007-6606-8\_8">[More Information]</a>

Harrison, S., Morfopoulos, C., Dani, S., Prentice, I., Arneth, A., Atwell, B., Barkley, M., Leishman, M., Loreto, F., Medlyn, B., Possell, M., et al (2013). Volatile isoprenoid emissions from plastid to planet. *New Phytologist*, 197(1), 49-57. <a href="http://dx.doi.org/10.1111/nph.12021">[More Information]</a>

## 2012

Hewitt, C., Ashworth, K., Boynard, A., Guenther, A., Langford, B., MacKenzie, A., Misztal, P., Nemitz, E., Owen, S., Possell, M., et al (2012). Circadian control of global isoprene emissions. *Nature Geoscience*, 5(7), 435-436.

## 2011

Hewitt, C., Ashworth, K., Boynard, A., Guenther, A., Langford, B., MacKenzie, A., Misztal, P., Nemitz, E., Owen, S., Possell, M., et al (2011). Ground-level ozone influenced by circadian control of isoprene emissions. *Nature Geoscience*, 4(10), 671-674. <a href="http://dx.doi.org/10.1038/ngeo1271">[More Information]</a>

Vickers, C., Possell, M., Laothawornkitkul, J., Ryan, A., Hewitt, C., Mullineaux, P. (2011). Isoprene synthesis in plants: Lessons from a transgenic tobacco model. *Plant, Cell and Environment*, 34(6), 1043-1053. <a href="http://dx.doi.org/10.1111/j.1365->

3040.2011.02303.x">[More Information]</a>

## 2010

Possell, M., Ryan, A., Vickers, C., Mullineaux, P., Hewitt, C. (2010). Effects of fosmidomycin on plant photosynthesis as measured by gas exchange and chlorophyll fluorescence. *Photosynthesis Research*, 104(1), 49-59. <a href="http://dx.doi.org/10.1007/s11120-009-9504-5">[More Information]</a>

Vickers, C., Possell, M., Hewitt, C., Mullineaux, P. (2010). Genetic structure and regulation of isoprene synthase in Poplar (*Populus* spp.). *Plant Molecular Biology*, 73(4-5), 547-558. <a href="http://dx.doi.org/10.1007/s11103-010-9642-3">[More Information]</a>

Possell, M., Hewitt, C. (2010). Isoprene emissions from plants are mediated by atmospheric CO<sub>2</sub> concentrations. *Global Change Biology*, 17(4), 1595-1610. <a href="http://dx.doi.org/10.1111/j.1365-2486.2010.02306.x">[More Information]</a>

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Ryan, A., Cojocariu, C., Possell, M., Davies, W., Hewitt, C. (2009). Defining hybrid poplar (*Populus deltoides* X *Populus trichocarpa*) tolerance to ozone: identifying key parameters. *Plant, Cell and Environment*, 32(1), 31-45. <a href="http://dx.doi.org/10.1111/j.1365-3040.2008.01897.x">[More Information]</a>

Possell, M., Hewitt, C. (2009). Gas exchange and photosynthetic performance of the tropical tree *Acacia nigrescens* when grown in different CO<sub>2</sub> concentrations. *Planta*, 229(4), 837-846. <a href="http://dx.doi.org/10.1007/s00425-008-0883-1">[More Information]</a>

Vickers, C., Possell, M., Cojocariu, C., Velikova, V., Laothawornkitkul, J., Ryan, A., Mullineaux, P., Hewitt, C. (2009). Isoprene synthesis protects transgenic tobacco plants from oxidative stress. *Plant, Cell and Environment*, 32(5), 520-531. <a href="http://dx.doi.org/10.1111/j.1365-3040.2009.01946.x">[More Information]</a>

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Laothawornkitkul, J., Moore, J., Taylor, J., Possell, M., Gibson, T., Hewitt, C., Paul, N. (2008). Discrimination of Plant Volatile Signatures by an Electronic Nose: A Potential Technology for Plant Pest and Disease Monitoring. *Environmental Science and Technology*, 42(22), 8433-8439. <a href="http://dx.doi.org/10.1021/es801738s">[More Information]</a>

Laothawornkitkul, J., Paul, N., Vickers, C., Possell, M., Taylor, J., Mullineaux, P., Hewitt, C. (2008). Isoprene emissions influence herbivore feeding decisions. *Plant, Cell and Environment*, 31(10), 1410-1415. <a href="http://dx.doi.org/10.1111/j.1365-3040.2008.01849.x">[More Information]</a>

Laothawornkitkul, J., Paul, N., Vickers, C., Possell, M., Mullineaux, P., Hewitt, C., Taylor, J. (2008). The role of isoprene in insect herbivory. *Plant Signaling and Behavior*, 3(12), 1141-1142. <a href="http://dx.doi.org/10.4161/psb.3.12.7171">[More Information]</a>

## 2006

Wilkinson, M., Owen, S., Possell, M., Hartwell, J., Gould, P., Hall, A., Vickers, C., Hewitt, C. (2006). Circadian control of isoprene emissions from oil palm (*Elaeis guineensis*). *Plant*

*Journal*, 47, 960-968. <a href="http://dx.doi.org/10.1111/j.1365-313X.2006.02847.x">[More Information]</a>

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Heath, J., Ayres, E., Possell, M., Bardgett, R., Black, H., Grant, H., Ineson, P., Kerstiens, G. (2005). Rising Atmospheric CO<sub>2</sub> Reduces Sequestration of Root-Derived Soil Carbon. *Science*, 309(5741), 1711-1713. <a href="http://dx.doi.org/10.1126/science.1110700">[More Information]</a>

Possell, M., Hewitt, C., Beerling, D. (2005). The effects of glacial atmospheric CO<sub>2</sub> concentrations and climate on isoprene emissions by vascular plants. *Global Change Biology*, 11(1), 60-69. <a href="http://dx.doi.org/10.1111/j.1365-2486.2004.00889.x">[More Information]</a>