

Publication list of T. Koike in English

Original paper:

>2017

- (1) Agathokleous, E., Vanderstock, A., Kita, K., and Koike, T. (2017) Stem and crown growth of Japanese larch and its hybrid F1 grown in two soils and exposed to two free-air O₃ regimes. *Environmental Science and Pollution Research*. (accepted)
- (2) Mochizukia T, Watanabeb M, Koike T, and Tani A (2017) Monoterpene emissions from needles of hybrid larch F₁ (*Larix gmelinii* var. *japonica* × *Larix kaempferi*) grown under elevated carbon dioxide and ozone. *Atmospheric Environment* 148: 197-202. <http://dx.doi.org/10.1016/j.atmosenv.2016.10.041>.

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- (3) Kitao, M., Y. Yasuda, Y. Kominami, K. Yamanoi, M. Komatsu, T. Miyama, Y. Mizoguchi, S. Kitaoka, K. Yazaki, H. Tobita, K. Yoshimura, T. Koike, and T. Izuta (2016) Increased phytotoxic O₃ dose accelerates autumn senescence in an O₃-sensitive beech forest even under the present-level O₃. *Scientific Reports*, Article number: 32549 (2016) doi:10.1038/srep32549
- (4) Agathokleous, E., Paoletti, E., Saitanis, C.J., Manning, W.J., Sugai, T. and Koike, T. (2016). Impacts of ethylene diurea (EDU) soil drench and foliar spray in *Salix sachalinensis* protection against O₃-induced injury. *Science of the Total Environment* 573:1053-1062.
- (5) Shi, C., Eguchi, N., Meng, F., Watanabe, T., Satoh, F. and Koike, T. (2016) Retranslocation of foliar nutrients of deciduous tree seedlings in different soil condition under free-air O₃ fumigation, iForest - Biogeosciences and Forestry (doi: 10.3832/ifer1889-009) on line journal
- (6) Agathokleous, E., Paoletti, E., Saitanis, C.J., Manning, W.J., and Koike, T. (2016). High doses of ethylene diurea (EDU) are not toxic to willow and act as nitrogen fertilizer. *Science of the Total Environment* 566-567: 841-850. DOI: 10.1016/j.scitotenv.2016.05.122
- (7) Agathokleous, E., Watanabe, M., Eguchi, N., Nakaji, T., Satoh, F., and Koike, T. (2016). Root production of *Fagus crenata* Blume saplings grown in two soils and exposed to elevated CO₂ concentration: an 11-year free-air-CO₂ enrichment (FACE) experiment in northern Japan. *Water, Air, & Soil Pollution*, 227: 187. DOI: 10.1007/s11270-016-2884-1
- (8) Sakikawa, T., Nakamura, M., Watanabe, M., Oikawa, M., Satoh, F. and Koike, T. (2106) Leaf phenology and insect grazing of Japanese white birch saplings grown under free-air ozone exposure. *Journal of Agricultural Meteorology* 72: 80-84.
- (9) Shi, C., Kitao, M., Agathokleous, E., Watanabe, M., Tobita, H., Yazaki, K., Kitaoka, S. and Koike, T. (2016) Foliar chemical composition of two oak species grown in a free-air enrichment system with elevated O₃ and CO₂. *Journal of Agricultural Meteorology* 72: 50-58
- (10) Wang, XN, Agathokleous, E., Qu, L.Y., Watanabe, M., and Koike, T. (2016) Effects of CO₂ and/or O₃ on the interaction between root of woody plants and ectomycorrhizae. *Journal of Agriculture Meteorology* 72: 95-105.

- (11) Kitaoka, S. · Matsuki, S., · Kitao, M., · Tobita, H., · Utsugi, H., · Maruyama, Y. and Koike, T. (2016) The photosynthetic response of four seral deciduous broad-leaved tree seedlings grown under elevated CO₂ concentrations. *Journal of Agriculture Meteorology* 72: 43-49, DOI: 10.2480/agrmet.D-14-00016
- (12) Kitao M, Hida T, Eguchi N, Tobita H, Utsugi H, Uemura A, Kitaoka S and Koike T (2016) Light compensation point in shade-grown seedlings of deciduous broadleaf tree species with different successional traits raised under elevated CO₂. *Plant Biology* DOI: 10.1111/plb.12400.
- (13) Agathokleous, E., Saitanis, C.J., Wang X.N., Watanabe M. and Koike, T. (2016) A review study on past 40 years of research on effects of tropospheric O₃ on belowground structure, functioning and processes of trees: a linkage with potential ecological implications. *Water, Air, & Soil Pollution* 227:33-DOI: 10.1007/s11270-015-2715-9
- (14) Wang, XN., S. Fujita, T. Nakaji, M. Watanabe, F Satoh and T. Koike (2016) Fine root turnover of Japanese white birch (*Betula platyphylla* var. *japonica*) grown under elevated CO₂ in northern Japan. *Trees* 30:363-374
- (15) Agathokleous E, Watanabe M, Nakaji T, Wang XN, Satoh F, and Koike T. (2016) Impact of elevated CO₂ on root traits of a sapling community of three birches and an oak: A free-air-CO₂ enrichment (FACE) in northern Japan. *Trees* 30: 353-362, DOI: 10.1007/s00468-015-1272-6
- (16) Watanabe M, Kitaoka S, Eguchi N, Watanabe Y, Satomura T, Takagi K, Satoh F and Koike T (2016) Photosynthetic traits of Siebold's beech seedlings in changing light conditions by removal of shading trees under elevated CO₂. *Plant Biology*, doi:10.1111/plb.12382
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- (18) Agathokleous, E., Saitanis, C.J., Satoh, F. and Koike, T. (2015) Wild plant species as subjects in O₃ research. *Eurasian J. Forest Research* 18: 1-36.
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- (20) Kam D-G, Shi, C., Watanabe, M., Kita, K., Satoh, F. and Koike, T. (2015) Growth of Japanese and hybrid larch seedlings grown under free-air O₃ fumigation—an initial assessment of the effects of adequate and excessive nitrogen. *Journal of Agricultural Meteorology* 71: 239-244
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- (22) Hoshika, Y., Watanabe, M., Inada, N. and Koike, T. (2015) The effect of ozone-induced stomatal closure on ozone uptake and its changes due to leaf age in sun and shade leaves of Siebold's beech. *Journal of Agricultural Meteorology* 71: 218-226.
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- (25) Hoshika, Y., Katata, G., Deushi, M., Watanabe, M., Koike, T. and Paoletti, E. (2015) Ozone-induced stomatal sluggishness changes carbon and water balance of temperate deciduous forests, *Scientific Report* 04/2015; 5:9871. DOI:10.1038/srep09871
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- (28) Agathokleous, E., Koike, T., Watanabe, M., Hoshika, Y., and Saitanis, C.J. (2015). Ethylene-di-urea (EDU), the most effective phytoprotectant against O₃ deleterious effects and a valuable research tool: a mystery of decades. *Journal of Agricultural Meteorology* 71: 185-195.
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- (30) Koike, T., Watanabe, M., Watanabe, Y., Agathokleous, E., Mao, QZ., Eguchi, N., Takagi, K., Satoh, F., Kitaoka, S., and Funada, R. (2015). Ecophysiology of deciduous trees native to Northeast Asia grown under FACE (Free Air CO₂ Enrichment), *Journal of Agricultural Meteorology* 71: 174-184.
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- (33) Hoshika, Y., Watanabe, M., Kitao, M., Haberle, K-H., Grams, T.E.E., Koike, T. and Matyssek, R. Ozone induces stomatal narrowing in European and Siebold's beeches: a comparison between two experiments of free-air ozone exposure. *Environmental Pollution* 196: 527-533, DOI: 10.1016/j.envpol.2014.07.034.

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