

## Publication list of T. Koike in English

### Original paper:

#### >2016

- (1) Kitao, M., Y. Yasuda, Y. Kominami, K. Yamanoi, M. Komatsu, T. Miyama, Y. Mizoguchi, S. Kitaoka, K. Yazaki, H. Tobit1, K. Yoshimura, T. Koike, and T. Izuta (2016) Increased phytotoxic O<sub>3</sub> dose accelerates autumn senescence in an O<sub>3</sub>-sensitive beech forest even under the present-level O<sub>3</sub>. Scientific Reports (in press)
- (2) 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 O<sub>3</sub> fumigation, iForest - Biogeosciences and Forestry (doi: 10.3832/ifor1889-009) on line journal
- (3) 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
- (4) 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 CO<sub>2</sub> concentration: an 11-year free-air-CO<sub>2</sub> enrichment (FACE) experiment in northern Japan. Water, Air, & Soil Pollution, 227: 187.DOI: 10.1007/s11270-016-2884-1
- (5) 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.
- (6) 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 O<sub>3</sub> and CO<sub>2</sub>. Journal of Agricultural Meteorology 72: 50-58
- (7) Wang, XN, Agathokleous, E., Qu, L.Y., Watanabe, M., and Koike, T. (2016) Effects of CO<sub>2</sub> and/or O<sub>3</sub> on the interaction between root of woody plants and ectomycorrhizae. Journal of Agriculture Meteorology 72: 95-105.
- (8) 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 CO<sub>2</sub> concentrations. Journal of Agriculture Meteorology 72: DOI: 10.2480/agrmet.D-14-00016
- (9) 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 CO<sub>2</sub> . Plant Biology DOI: 10.1111/plb.12400.
- (10) 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 O<sub>3</sub> 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

- (11) 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 CO<sub>2</sub> in northern Japan. *Trees* 30: 363-374
- (12) Agathokleous E, Watanabe M, Nakaji T, Wang XN, Satoh F, and Koike T. (2016) Impact of elevated CO<sub>2</sub> on root traits of a sapling community of three birches and an oak: A free-air-CO<sub>2</sub> enrichment (FACE) in northern Japan. *Trees* 30: 353-362, DOI: 10.1007/s00468-015-1272-6
- (13) 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 CO<sub>2</sub>. *Plant Biology*, doi:10.1111/plb.12382
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- (14) Agathokleous, E., Koike, T., Saitanis, C.J., Watanabe, M., Satoh, F. and Hoshika, Y. (2015) Ethylenediurea (EDU) as a protectant of plants against O<sub>3</sub>. *Eurasian J. Forest Research* 18:37-50.
- (15) Agathokleous, E., Saitanis, C.J., Satoh, F. and Koike, T. (2015) Wild plant species as subjects in O<sub>3</sub> research. *Eurasian J. Forest Research* 18: 1-36.
- (16) Quentin, AG., Pinkard, EA., Ryan, MG., Tissue, DT., Baggett, LS., Adams, HD., Maillard, P., Marchand, J., Landhäusser, SM., Lacoite, A., Gibon, Y., Anderegg, WRL., Asao, S., Atkin, OK., Bonhomme, M., Claye, C., Chow, PS., Clément-Vidal, A., Davies, NW., Dickman, LT., Dumbur, R., Ellsworth, DS. Falk, K., Galiano, L., Grünzweig, JM., Hartmann, H., Hoch, G., Hood, S., Jones, JE., **Koike, T.**, Kuhlmann, I., Lloret, F., Maestro, M., Mansfield, SD., Martínez-Vilalta, J., Maucourt, M., McDowell, NG., Moing, A., Muller, B., Nebauer, SG., Niinemets, Ü., Palacio, S., Piper, F., Raveh, E., Richter, A., Rolland, G., Rosas, T., Saint-Joanis, B., Sala, A., Smith, RA., Sterck, F., Stinziano, JR., Tobias, M., Unda, F., **Watanabe, M.**, Way, DA., Weerasinghe, LK., Wild, B., Wiley, E., and Woodruff, DR. (2015) Non-structural carbohydrates in woody plants compared among laboratories. *Tree Physiology*. doi: 10.1093/treephys/tpv073 **"Now world standard"**
- (17) 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 O<sub>3</sub> fumigation—an initial assessment of the effects of adequate and excessive nitrogen. *Journal of Agricultural Meteorology* 71: 239-244
- (18) Kayama, M., Qu, L.Y. and Koike T. (2015) Elements and ectomycorrhizal symbiosis affecting the growth of Japanese larch seedlings regenerated on slopes of an active volcano in northern Japan. *Trees* 29: 1567-1579.
- (19) 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.
- (20) Watanabe, M., Hoshika, Y., Inada, N. and Koike, T. (2015) Difference in photosynthetic responses to free air ozone fumigation between upper and lower canopy leaves of Japanese oak (*Quercus mongolica* var. *crispula*) saplings. *Journal of Agricultural Meteorology* 71: 227-231.
- (21) Pretzsch, H., P. Biber, E. Uhl, J. Dahlhausen, T. Rötzer, J. Caldentey, T. Koike, T. van Con, A. Chavanne, T. Seifert, B. du Toit, C. Farnden, S. Pauleit (2015) Crown size and growing space requirement of common tree species in urban centres,

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- (23) Fukuzawa, K., H. Shibata, K. Takagi, F. Satoh, T. Koike and K. Sasa (2015) Roles of dominant understory Sasa bamboo in carbon and nitrogen dynamics following canopy tree removal in a cool-temperate forest in northern Japan: Role of Understory Sasa in Forest. *Plant Species Biology* 04/2015; 30(2). DOI:10.1111/1442-1984.12086
- (24) Kayama, M. and Koike, T. (2015) Differences in growth characteristics and dynamics of elements in seedlings of two birch species grown in serpentine soil in northern Japan. *Trees-structure and function* 29:171-184. DOI: 10.1007/s00468-014-1102-2
- (25) Agathokleous, E., Koike, T., Watanabe, M., Hoshika, Y., and Saitanis, C.J. (2015). Ethylene-di-urea (EDU), the most effective phytoprotectant against O<sub>3</sub> deleterious effects and a valuable research tool: a mystery of decades. *Journal of Agricultural Meteorology* 71: 185-195.
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- (27) 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 CO<sub>2</sub> Enrichment), *Journal of Agricultural Meteorology* 71: 174-184.
- (28) Agathokleous, E., Saitanis, C.J., and Koike, T. (2015) Tropospheric O<sub>3</sub>, the nightmare of wild plants –A review study. *Journal of Agricultural Meteorology* 71: 142-152.
- (29) Wang, XN, L Qu, Q Mao, M Watanabe, Y Hoshika, A Koyama, K Kawaguchi, Y Tamai and T Koike (2015) Ectomycorrhizal colonization and growth of the hybrid larch F<sub>1</sub> under elevated CO<sub>2</sub> and O<sub>3</sub>. *Environmental Pollution* 197: 116-126
- (30) 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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- (32) Watanabe, Y., Karaki, T., Kondo, T. and Koike, T. (2014) Seed development of the black locust and physical dormancy in northern Japan. *Phyton* 54: 305-320 DOI: 10.12905/0380.
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- (35) Cao D, Shi FC, Koike T, Lu Z and Sun J (accepted) Halophyte plant communities affecting enzyme activity and microbes in saline soils of the Yellow River Delta in China. *Journal of Clean- Soil Air Water*, DOI: 10.1002/clen.201300007
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- (37) Mao QZ, Watanabe M, Makoto K, Kita K and Koike T (2014) High nitrogen deposition may enhance growth of the new hybrid larch F<sub>1</sub> growing at two phosphorus levels. *Landscape and Ecological Engineering* 10:1-8, DOI:10.1007/s11355-0212-0207-2

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- (54) Koike, T., Mao, QZ., Inada, N., Kawaguchi, K., Hoshika, Y., Kita, K. and Watanabe, M. (2012) Growth and photosynthetic responses of cuttings of a hybrid larch (*Larix gmelinii* var. *japonica* x *L. kaempferi*) to elevated ozone and/or carbon dioxide. *Asian Journal of Atmospheric Environment* 6:104-110.
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- (62) Kim, Y.S., Imori, M., Watanabe, M, Hatano, R., Yi, M,J, and Koike, T (2012) Simulated nitrogen inputs influence methane and nitrous oxide fluxes from a young larch plantation in northern Japan. *Atmospheric Environment* 46:36-44
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