

Publication list of T. Koike in English

Original paper:

>2011

- (1) Kim, Y.S., Watanabe, M., Imori, M., Sasa, K., Takagi, K., Hatano, R. and Koike, T. (2011) Reduced atmospheric CH₄ consumption by two forest soils under elevated CO₂ concentration in a FACE system in northern Japan. *Japanese Journal of Atmospheric Environment* 46:30-36.
- (2) Hirano, A. Hongo I. and Koike, T. (2011) Morphological and physiological response of Siebold's beech (*Fagus crenata*) seedlings grown under CO₂ concentration ranging from pre-industrial to expected future levels. *Landscape and Ecological Engineering* 7: in press
- (3) Karaki, T., Watanabe, Y., Kondo, T. and Koike, T. (2011) Strophiole of seeds of the black locust acts as a water gap. *Plant Species Biology* (accepted)
- (4) Koike, T., Shimizu, Y. and Ito, S. (2011) Development and application of Forest Aesthetics in Japan in relation to the ideas of H. von Salisch. *Archiv für Forstwesen und Landschaftsökologie* 45:
- (5) Kayama, M., Satoh, F. and Koike, T. (submitted) Photosynthetic rate, needle longevity, and nutrient contents in *Picea glehnii* growing on strongly acidic volcanic ash soil in northern Japan.

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- (6) Makoto, K., Choi, D.S., Hashidoko, Y. and Koike, T. (2010) The growth of *Larix gmelinii* seedlings as affected by charcoal produced at two different temperatures. *Biology and Fertility of Soils* 46: DOI: 10.1007/s00374-010-0518-0
- (7) Mao, Q., Watanabe, M and Koike, T. (2010) Growth characteristics of two promising tree species for afforestation, birch and larch in the northeastern part of Asia. *Eurasian Journal of Forest Research* 13: 69-76.
- (8) Aoyama, C., Novriyanti, E. and Koike, T. (2010) Induced defense of leaves of Japanese white birch seedlings grazed by Gypsy moth larvae. *Eurasian Journal of Forest Research* 13: 49-55.
- (9) Novriyanti, E., Aoyama, C., Watanabe, M. and Koike, T. (2010) Plants defense characteristics and hypothesis on the Birch species. *Eurasian Journal of Forest Research* 13: 77-85.
- (10) Makoto, K., Tamai, Y., Kim, Y.S. and Koike, T. (2010) Buried charcoal layer and ectomycorrhizae cooperatively promote the growth of *Larix gmelinii* seedlings. *Plant and Soil*: 327: 143-152
- (11) Mori, A., Yamaji, K., Ishida, A., Prokushikin S.G., Masyagina O., Hagihara, A., Rafiqul Hoque, A.T.M., Suwa, R., Osawa, A., Nishizono, T., Ueda, T., Kinjo, M., Miyagi, T., Kajimoto, T., Koike, T., Matsuura, Y., Toma, T., Zyryanova, O.A., Abaimov, A.P., Awaya, Y., Araki, M.G., Kawakasaki, T., Chiba, Y., and Umari M. (2010) Mixed-power scaling of whole-plant respiration from seedlings to giant trees. *Proceedings of the National Academy of Sciences* 107: 1447-1451
- (12) Morimoto J., Kominami R. and Koike T. (2010) Distribution and characteristics of the soil seed bank of the black locust (*Robinia pseudoacacia*) in a headwater basin in northern Japan. *Landscape and Ecological Engineering*; DOI: 10.1007/s11355-009-0096-1.

- (13) Zyryanova, O.A., Zyryanov, V.I., Trazawa, M. and Koike, T. (2010) White Birch Trees as Resource Species of Russia : Their Distribution, Ecophysiological Features, Multiple Utilizations. *Eurasian Journal of Forest Research* 13: 25-40.
- (14) Watanabe, M., Umemoto-Yamaguchi, M., Koike, T. and Izuta, T. (2010) Growth and photosynthetic response of *Fagus crenata* seedlings to ozone and/or elevated carbon dioxide. *Landscape and Ecological Engineering* 6:181-190.
- (15) Watanabe, Y., Satomura, T., Sasa, K., Funada, R. and Koike, T. (2010) Differential anatomical responses to elevated CO₂ in saplings of four hardwood species. *Plant & Cell Environment* 33:1101 – 1111
- (16) Suetsugu, N., Satoh, F. and Koike, T. (2010) An atlas of Collembola species in the Sapporo Experimental Forest of Hokkaido University in Northern Japan. *Eurasian Journal of Forest Research* 13: 57-67.

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- (17) Koike, T. (2009) A trial of revegetation practices with larch species under changing environment. *Landscape and Ecological Engineering* 5: 97 - 98
- (18) Zu, Y., Wang, W., Wang, H., Liu W, Cui S. and Koike, T (2009) Soil CO₂ efflux, carbon dynamics, and change in thermal conditions from contrasting clear-cut sites during natural restoration and uncut larch forests in northeast China. *Climate* 96:137–159, DOI 10/1007/s-10584 -009-9601-7.
- (19) Ryu K, Watanabe M, Shibata H, Takagi K, Nomura M, Koike T. (2009) Ecophysiological responses of the larch species in northern Japan to environmental changes as a base of afforestation. *Landscape and Ecological Engineering* 5: 99 -106
- (20) Qu, L., Kitaoka, S., Kuromaru, M., Osaki, M., Sasa, K. and Koike, T. (2009) Root-shoot communication of the seedlings of Japanese larch and its hybrid grown in different temperature regimes. *Landscape and Ecological Engineering* 5: 115 – 123.
- (21) Kayama, M. Makoto, K. Nomura, M, Satoh, F. and Koike, T. (2009) Dynamics of elements in larch seedlings (*Larix kaempferi*) regenerated on serpentine soil in northern Japan. *Landscape and Ecological Engineering* 5: 125 – 135.
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- (23) Kayama, M., Makoto, K., Nomura, M., Sasa, K. and Koike, T. (2009) Growth characteristics of Sakhalin spruce (*Picea glehnii*) planted on the northern Japanese hillsides exposed to strong winds. *Trees - Structure and Function* 23: 145-157
- (24) Takagi,K., Fukuzawa,K., Liang,N., Kayama,M., Nomura,M., Hojyo,H., Sugata,S., Shibata,H., Fukazawa,T., Takahashi,Y., Nakaji,T., Oguma,H., Mano,M., Akibayashi,Y., Murayama,T., Koike,T., Sasa,K. and Fujinuma,Y. (2009) Change in the CO₂ balance under a series of forestry activities in a cool-temperate mixed 2 forest with dense undergrowth. *Global Change Biology* 14: DOI:10.1111/j.1365-2486.2008.01975.x

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- (25) Choi, D.S., Jin, H.O., Chung, D. J. Sasa, K. and Koike, T. (2008) Growth and physiological activity in *Larix kaempferi* seedlings inoculated with ectomycorrhizae affected by soil acidification. *Trees - Structure and Function* 22:729-735
- (26) Eguchi, N., Karatsu, K., Ueda, T., Funada, R., Takagi, K., Hiura, T., Sasa, K.

and Koike, T. (2008) Photosynthetic responses of birch and alder saplings grown in a free air CO₂ enrichment system in northern Japan. *Trees - Structure and Function* 22: 437–447.

- (27) Eguchi, N., Morii, N., Ueda, T., Funada, R., Takagi, K., Hiura, T., Sasa, K. and Koike, T. (2008) Changes in petiole hydraulic structure and leaf water flow in birch and oak saplings in an enhanced CO₂ environment. *Tree Physiology* 28:287–295.
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- (31) Kitaoka, S., Sakata, T., Koike, T., Tobita, H., Uemura, A., Kitao, M., Maruyama, Y., Sasa, K. and Utsugi, H. (2007) Methane emission from leaves of larch, birch and oak saplings grown under elevated CO₂ in northern Japan –A preliminary study- *Journal of Agriculture Meteorology* 63: 201-206.
- (32) Kayama, M., Kitaoka, S., Choi, D.S. Wang, W. and Koike, T. (2007) Needle longevity and growth characteristics of eight spruce species planted in northern Japan. *Tree Physiology* 27: 1585-1593.
- (33) Kitao, M., Lei, T.T., Koike, T., Kayama, M., Tobita, H. and Maruyama, Y. (2007) Interaction of drought and elevated CO₂ concentration on photosynthetic down-regulation and susceptibility to photoinhibition in Japanese white birch seedlings grown under limited N availability. *Tree Physiology* 27: 727-735.
- (34) Wang, W., Wang, H., Zu, Yuangang, Yu, Jinghua and Koike, T. (2007) Photosynthetic characteristics of regenerated plantlets of *Camptotheca acuminata* as a diagnostic for tissue cultured plantlets in acclimatization in field growth. *Eurasian Journal of Forest Research* 10: 201-207.
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- (37) Kayama, M., Choi, D.S., Nomura, M., Sasa, K., Satoh, F. and Koike, T. (2007) Reforestation trial with Sakhalin spruce after forest fires in northern Japan. *Eurasian Journal of Forest Research* 10: 31-39.
- (38) Makoto, K., Nemilostiv, Y.P., Zyryanova, O.A., Kajimoto, T., Matsuura, Y., Yoshida, T., Satoh, F., Sasa, K. and Koike, T. (2007) Regeneration after forest fires in mixed conifer broadleaved forests of the Amur region in Far Eastern Russia: the relationship between species specific traits against fire and recent fire regimes.

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- (44) Kajimoto, T., Matsuura, Y., Osawa, A., Abaimov, A.P., Zyryanova, O.A., Mori, S. and Koike, T. (2006) Size-mass allometry and biomass allocation of two larch species growing on the continuous permafrost region in Siberia. Forest Ecology and Management 222: 314-325.
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