

Name

Akira Tani

Position

Professor, University of Shizuoka

Education

B.S. in Agriculture	Osaka Prefecture University, March 1989
Master of Agriculture	Graduate School, Osaka Prefecture University, March 1991
PhD (Agriculture)	Osaka Prefecture University, February 1996

Academic Experience

Nov. 1991-Mar. 1997	Assistant professor, Osaka Prefecture University
Apr.1997-Mar.2007	Lecture, Associate professor, Tokai University
Apr.1997-Mar.2015	Associate professor, University of Shizuoka
Apr.2015-Present	Professor, University of Shizuoka
June 2001-Mar. 2002	Visiting researcher, Lancaster University, UK

Research Experience

- Air quality improvement by plant
- Terpenoid emissions by plant
- Plant cultivation under controlled environment
- Plant cultivation under solar panel

Recent publications

Tani, A., Shiina, S., Nakaashima, K., Hayashi, M., Improvement in lettuce growth by light diffusion under solar panels, **J. Agric. Meteorol.**, 70, 139-149 (2014).

Yuan Ren, Ying Ge, Baojing Gu, Yong Min, Akira Tani, Jie Chang, The role of management strategies and environmental factors in determining the emissions of biogenic volatile organic compounds from urban greenspace. **Environ. Sci. Technol.**, 48, 6237–6246 (2014).

Tomoki Mochizuki, Akira Tani, Yoshiyuki Takahashi, Nobuko Saigusa, Masahito Ueyama, Long-term measurement of terpenoid flux above a *Larix kaempferi* forest using a relaxed eddy accumulation method, **Atmos. Environ.**, 83, 53–61 (2014)

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- Peipei Guo, Kejian Guo, Yuan Ren, Yan Shi, Jie Chang, Akira Tani, Ying Ge, Biogenic volatile organic compound emissions in relation to plant carbon fixation in a subtropical urban–rural complex, **Landscape and Urban Planning** 119:74-84 (2013)
- Sou N. Matsunaga, Shigeru Niwa, Tomoki Mochizuki, Akira Tani, Dai Kusumoto, Yasuhiro Utsumi, Tsutomu Enoki, Tsutomu Hiura: Seasonal variation in basal emission rates and composition of mono- and sesquiterpenes emitted from dominant conifers in Japan. **Atmos. Environ.**, 69, 124-130. (2013)
- Tani A, Nozoe S: Workplace concentrations and exposure assessment of monoterpenes in rosemary- and lavender-growing greenhouses. **J. Occupational health**, 54, 459-468. (2012)
- Miyama T, Okumura M, Kominami, Y, Yoshimura K, Ataka M, Tani A: Nocturnal isoprene emission from mature trees and diurnal acceleration of isoprene oxidation rates near *Quercus serrata* Thunb. leaves. **J. Forest Research** DOI 10.1007/s10310-012-0350-5, (2012)
- Chang J, Ren Y, Shi Ya, Zhu Y, Ge Y, Hong S, Jiao L, Lin F, Peng C, Mochizuki T, Tani A, Mu Y, Fu C: An inventory of biogenic volatile organic compounds for a subtropical urban-rural complex. **Atmos. Environ.**, 56, 115-123, (2012)
- Matsunaga SN, Chatani S, Nakatsuka S, Kusumoto D, Kubota K, Utsumi Y, Enoki T, Tani A, Hiura T., Determination and potential importance of diterpene (kaur-16-ene) emitted from dominant coniferous trees in Japan. **Chemosphere**, 87(8), 886-893, (2012)
- Tomomi Yasuda, Seiichiro Yonemura, Akira Tani. Comparison of the Characteristics of Small Commercial NDIR CO<sub>2</sub> Sensor Models and Development of a Portable CO<sub>2</sub> Measurement Device. **Sensors**, 12, 3641-3655, (2012)
- Tani A, Tozaki D, Okumura M, Nozoe S, Hirano T: Effect of drought stress on isoprene emission from two major *Quercus* species native to East Asia. **Atmos. Environ.**, 2011. 45(34), 6261-6266 (2011)
- Mochizuki T, Endo Y, Matsunaga S, Chang J, Ge Y, Haung C, Tani A: Factors affecting monoterpene emission from *Chamaecyparis obtuse*. **Geochemical J.**, 45, pp. e15 to e22 (2011).
- Matsunaga S, Chatani S, Nakatsuka S, Kusumoto D, Kubota K, Utsumi Y, Enoki T, Tani A, Hiura T: Volatile diterpene emission from dominant conifers in Japan. **Biogeosciences Discussions** 8(4), 6681-6700 (2011).

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Monoterpene and sesquiterpene emissions from Sugi (*Cryptomeria japonica*) based on a branch enclosure measurements. **Atmospheric Pollution Research**, 2, 16 - 23 (2011).

Akira Tani, Seita Bobe, Sachiko Shimizu: Uptake of methacrolein and methyl vinyl ketone by tree saplings and implications for forest atmosphere. **Environ. Sci. Technol.**, 44, 7096-7101 (2010).

Akira Tani, C. Nicholas Hewitt: Uptake of aldehydes and ketones at typical indoor concentrations by houseplants. **Environ. Sci. Technol.**, 43 (21), 8338-8343 (2009).