

Toyoki Kozai

Dr. Kozai was born in 1943, He was graduated from Chiba University in 1967. He obtained a Master's degree of Horticultural Science in 1969, and a PhD degree of Agricultural Engineering in 1972 from the University of Tokyo in 1972. When he started his academic career in 1973 as an agricultural engineer, his work was focused on greenhouse environment control engineering.

After establishing his early work on greenhouse light environments, energy savings, ventilation, computer control, knowledge engineering, closed systems with artificial lighting in the fields of greenhouse horticulture, his scientific interest was extended to in vitro environments under artificial light and their control for sugar-free (photoautotrophic) medium micropropagation. Recently, he has been working hard on plant factory with artificial lighting (or indoor/vertical farming).

After serving as Dean of Faculty of Horticulture and Director of Center for Environment, Health and Field Sciences, he was inaugurated as the president of Chiba University in 2005. He was back in research, education and extension as a professor emeritus in an endowed chair position at the Center for Environment, Health and Field Sciences, Chiba University in 2009, with a special focus on medicinal plant production under controlled environments.

During 2010-2018, he has been working as the president of Japan Plant Factory Association (non-profit organization) and is leading R & D of “plant factory with artificial lighting (PFAL)” and “integrative environment control of greenhouses” using heat pump, fogging and null-balance CO₂ enrichment systems.

He served as the president of The Agricultural Academy of Japan during 2014-2018.

Some selected awards: Friendship award from Chinese Government (2002), Lifetime Achievement Award (2009) from Society of In Vitro Biology, USA. The 2002 Purple Ribbon Award from Japanese Ministry of Education, Culture and Sports. Japan Prize of Agricultural Sciences from Association of Japanese Agricultural Scientific Societies, and many others. In 2018, honorary PhD degree from Mahidol University, Thailand. The 2019 Award ‘The Order of the Sacred Treasure, Gold and Silver Star’ from Japanese Government.