



Professor Hiroyuki Matsuda

Graduate School of Environment and Information
Sciences

Yokohama National University, Japan

Quantitative projection of plant species loss for 1697 taxa of Japanese vascular plants and its implication for achieving the 2010 biodiversity target

In order to quantify the risk of extinction, the Japanese Red Data Book compilation project monitored changes of population size during the past ten years for 1,697 threatened plant taxa in each of 3,781 map grids of ca.100 km². More than 500 citizen botanists contributed to monitor those taxa from 1994-1995 and from 2003-2004. This massive data set enabled us to carry out the world first quantitative projection of plant species loss at national level with stochastic simulations. As a result, 553 taxa were projected to go extinct during century, if the declining trends over the last decade continue. Our monitoring also suggests a pathway to reduce this rate of loss and so address the 2010 biodiversity target of "significant reduction in the rate of loss of biodiversity".

Curriculum Vitae

Hiroyuki Matsuda, Ph.D., a professor at the Yokohama National University, is the first Pew Fellow in Marine Conservation from Japan. He is a mathematical ecologist, received both his M.Sc. and D.Sc. degrees from Kyoto University, Kyoto, Japan. His interests include bioresource management, ecological risk management and evolutionary ecology. He is also the chair of Japan Program Committee for UNESCO's Man and the Biosphere Programme.