








**JSPS Exchange program for
East Asian Young Researchers**

*International
Workshop
for* **Conservation
Genetics of
Mangroves**



February 9 - 25, 2010, JAPAN

Exchange Program for East Asian Young Researchers (2009)

- Support: The Japan Society for the Promotion of Science (JSPS)
- Aim: To create regional cooperation among Asian countries through exchanges of next generation researchers.
- Competitive funds given to selected programs applied by Japanese universities or Institutions. (2009 2nd term, 29 accepted. 3 biological science)



An exchange program for ASEAN young researchers aiming at conservation of genetic diversity of mangroves.

- 2 Host Institutions and 5 host researchers:
 - Faculty of Science, Graduate School of Science, Chiba University (*Kajita, Takayama, Watano, Asakawa*)
 - The Iriomote Station of the Tropical Biosphere Research Center, the University of the Ryukyus (*Baba*)
- 12 Oversea Partner Institutions (9 countries)
 - Indonesia(3), Malaysia(2), Philippines(1), Thailand(1), Singapore(1), Myanmar(1), Vietnam(1), India(1), Australia(1)
- International Society for Mangrove Ecosystem (ISME) co-organizes the international workshop in Iriomote Island



**12 invited researchers (7 nationalities)
recommended by Oversea Partner Institutions**

Bayu Adjie: Bali Botanic Garden, Botanical Garden of Indonesia

Erwin Riyanto Ardli: Faculty of Biology, Jenderal Soedirman University, Kampus Biologi

Onrizal: Forestry Sciences Department, Universitas Sumatera Utara (USU)

Mohd Nazre Bin Saleh: Department of Forest Production, Faculty of Forestry, Universiti Putra Malaysia

Norhaslinda Binti Malekal: Institute for Tropical Biology and Conservation, Universiti Malaysia Sabah

Orlex Baylen Yllano: Graduate Biology Program, College of Arts, Sciences and: Technology, Adventist University of the Philippines

Sarawood Sungkaew: Forest Biology Department, Faculty of Forestry, Kasetsart University,

Wee Kim Shan: Department of Biological Sciences, National University of Singapore

Ma Khin Khin Soe: Department of Botany, University of Yangon

Nguyen Xuan Tung: Mangrove Ecosystem Research Centre (MERC), Hanoi National University of Education (HNUE)

Sankararamasubramanian Halasya Meenakshisundaram: Biotechnology Division, M.S.Swaminathan Research Foundation

Severino III Garengo Salmo: Centre for Marine Studies, The University of Queensland

Other participants

University of the Ryukyus:

Shin Watanabe (Director of the Iriomote Station, TBRC)

Mohammad Basyuni (Indonesia, University of the Ryukyus)

Chiba University:

Tassanai Jaruwattanaphan (Thailand)

Matin Miryeganeh (Iran)

Mohammad Vatanparast (Iran)

Takao Ikahata

Reiko Nagashima

Sayuri Nakata

Shino Murata

Junya Ono

Yoshimi Shinmura

Tsukuba Botanical Gardens

Sadamu Matsumoto

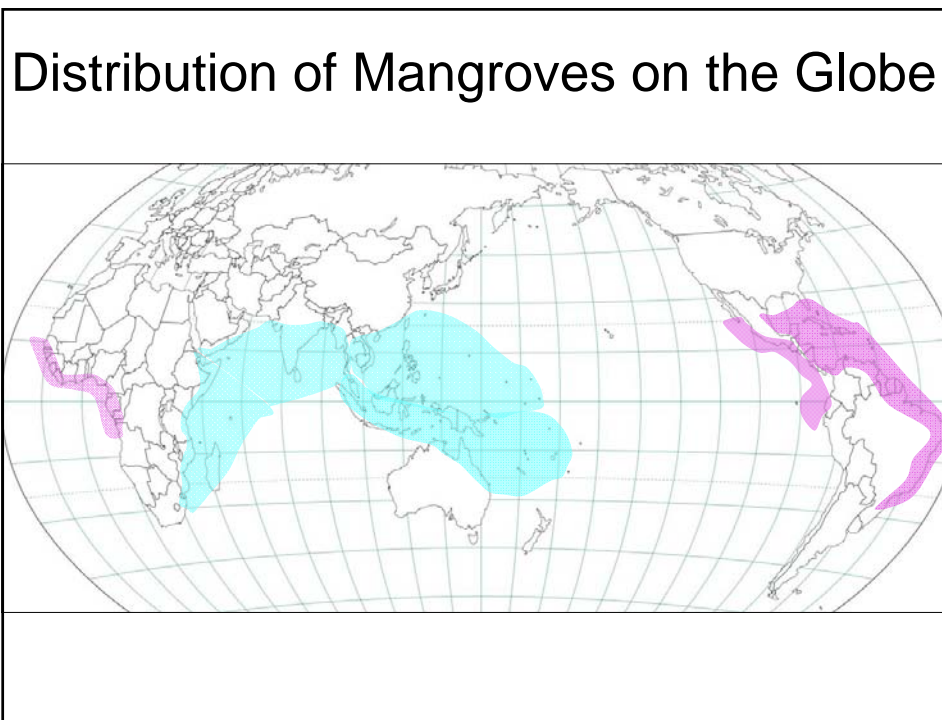
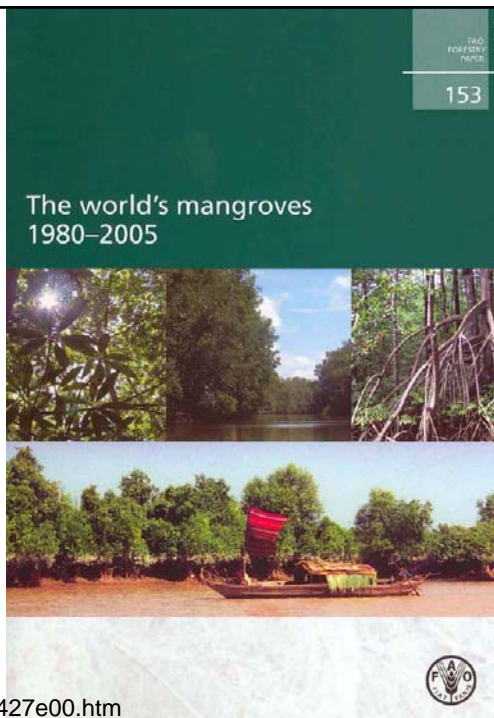
Takashi Matsumoto



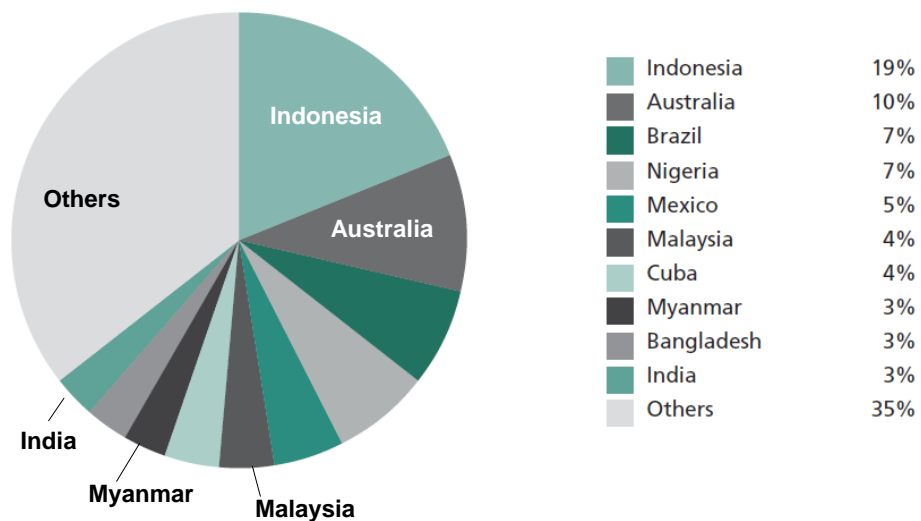
A Milestone for conservation of mangroves

- FAO Forestry Paper 153
- PDF version available from FAO website.
- Conservation and management status are reported.

<http://www.fao.org/docrep/010/a1427e/a1427e00.htm>



Percentage of world mangrove area by country, 2005



The world's mangrove 1980-2005 (FAO 2007)

Country	ha	year	Country	ha	year
Indonesia	3,062,300	2003	Iran, Islamic Rep.	19,234	1997
Malaysia	564,971	2005	Brunei Darussalam	18,418	1996
Myanmar	518,646	1999	Sri Lanka	9,530	1996
Bangladesh	476,215	1995	United Arab Emirates	4,000	1999
India	446,100	2003	Oman	1,088	1995
Philippines	247,362	2003	Yemen	927	1993
Thailand	244,085	2000	Japan	800	2005
Pakistan	158,000	2001	Qatar	500	1992
Viet Nam	157,500	2000	Singapore	500	1990
Cambodia	72,835	1997	Bahrain	100	1992
China	22,480	2001	Kuwait	5	2004
Saudi Arabia	20,400	1985	Australia	1,451,411	2005

Mangroves have great value for human life, but damaged greatly by human activities.

Healthy and protected forest

Multiple use of the ecosystem

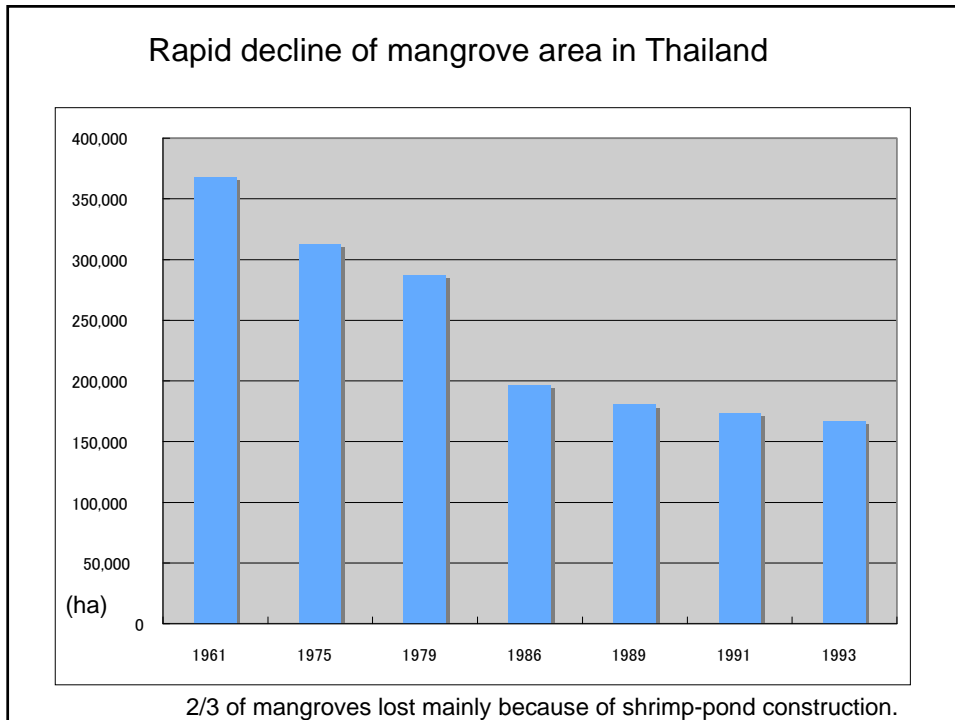
Mangrove rehabilitation

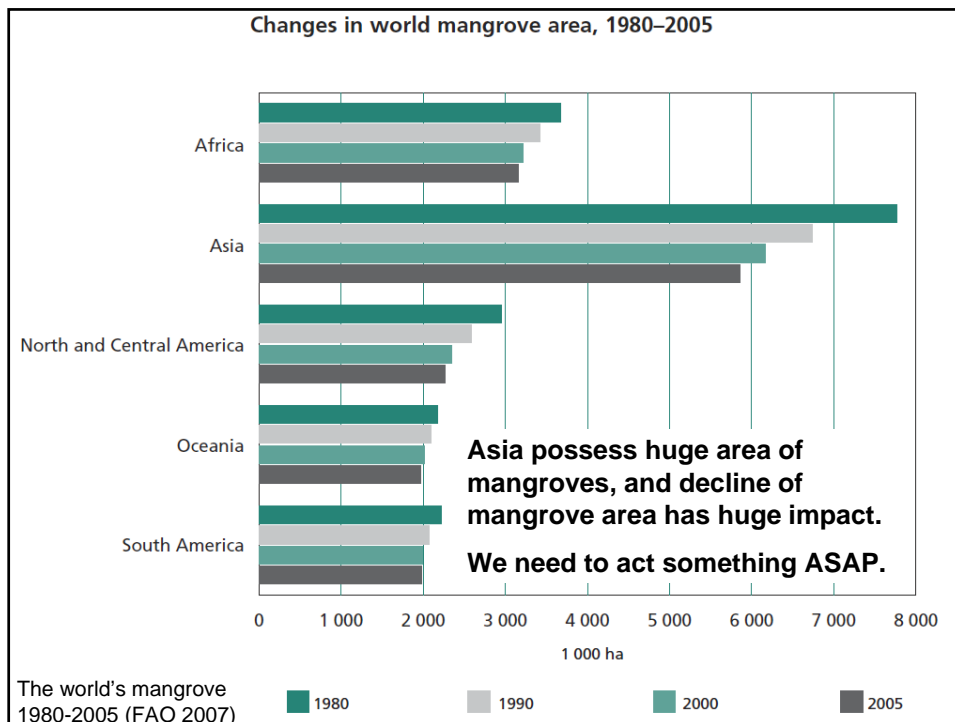
Mangrove stand killed by pollutants

Mangrove area converted to other land use

Degraded mangroves

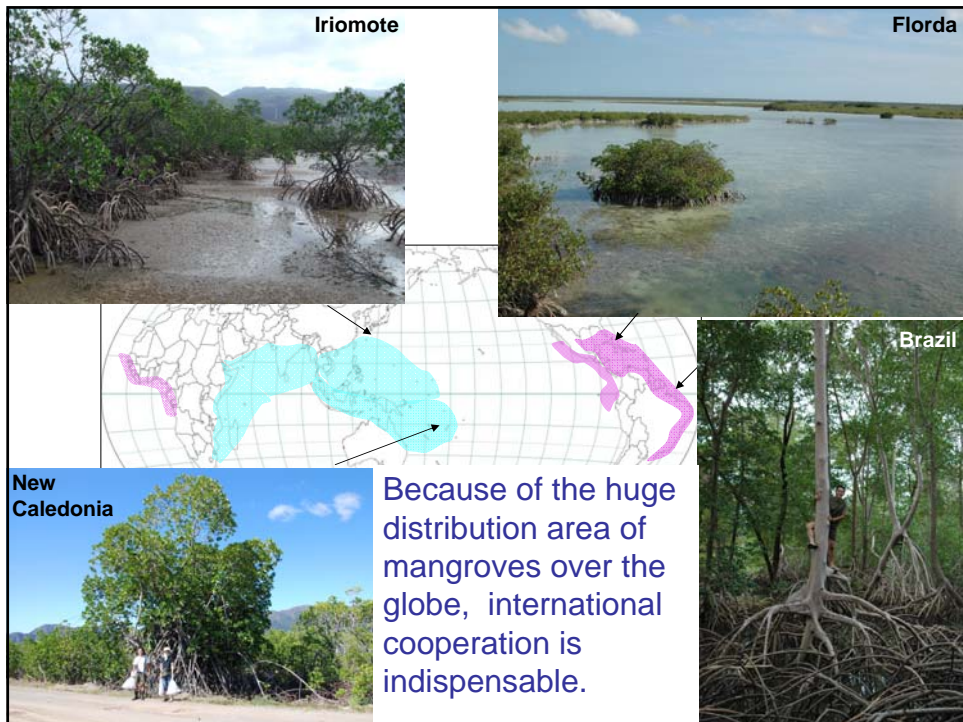
The world's mangrove 1980-2005 (FAO 2007)





Conservation Genetics

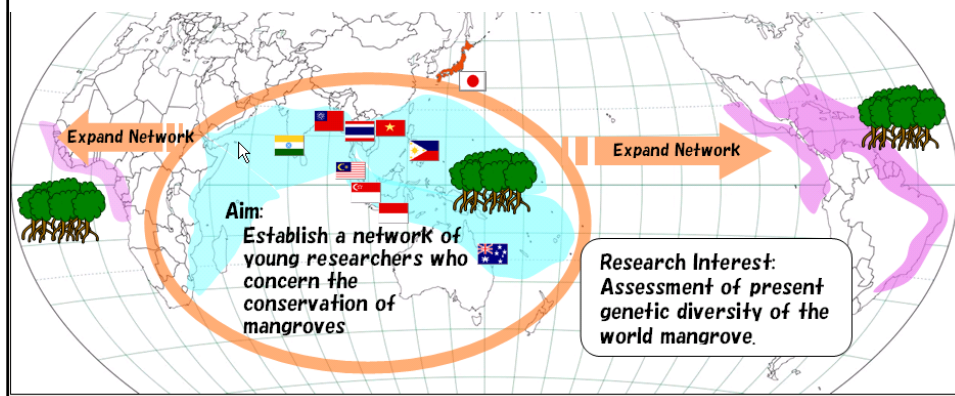
- The use of genetics to aid in conservation and minimize the risk of extinction.
- Expected contributions for conservations:
 - minimizing inbreeding and loss of genetic diversity
 - identifying populations (or cryptic species) to concern
 - resolving taxonomic uncertainties
 - determining population structure
 - defining management units within species
 - identifying populations and sites for reintroductions
- We can provide important data for conservation of mangroves using molecular markers.



The Exchange Program of Conservation Genetics of Mangroves

1. International Workshop in the Iriomote Station of TBRC, University of the Ryukyus
2. Training course of conservation genetics of mangroves in graduate school of science, Chiba University

In total of 17 days exchange program, we establish a network of young researchers, exchange our ideas, establishing friendship, and discuss our future act for conservation of mangroves.



Program

9:10: Opening remarks (Tadashi Kajita, Chiba University, JAPAN)

9:10 - 9:50: Shigeyuki Baba, 40min

9:50 - 10:30: Koji Takayama, 40min

10:30 - 10:45: Coffee Break

10:45 - 11:10: Mohammad Basyuni (25min)

11:10 - 11:25: Orlex B. Yllano (15min)

11:25 - 11:40: Bayu Adjie (15min)

11:40 - 11:55: Wee Shan Kim (15min)

11:55 - 13:30: Lunch

13:30 - 13:45: Sarawood Sangkaew (15min)

13:45 - 14:00: H.M. Shankararamasubramaniam (15min)

14:00 - 14:15: Erwin Riyanto Ardli (15min)

14:15 - 14:30: Nazre Saleh (15min)

14:30 - 14:45: Norhaslinda Binti Malekal (15min)

14:45 - 15:00: Coffee Break

15:00 - 15:15: Onrizal (15min)

15:15 - 15:30: Severino G. Salmo III (15min)

15:30 - 15:45: Khin Khin Soe (15min)

15:45 - 16:00: Nguyen Xuan Tung (15min)

16:00 - 16:30: Discussion

16:30: Closing sessions

17:30: Dinner and Mixer

*Time given to your talk is
including time for questions