Progress of Joint Research Activities

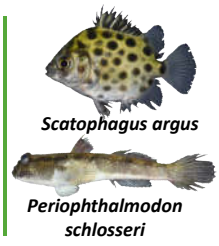
Research No.: ㉛ E-9 ODA Loan Joint Research	Date:16/Oct/2020

1	General Title	**To study possible solutions to protect the existing biodiversity and natural resources**
2	Core Members	**CTU**: **Duong Van Ni (Project Leader), Truong Hoang Dan (secretary), Tran Thi Kim Hong, Tran Dac Dinh, Nguyen Thanh Tung, Ly Van Loi, Phung Thi Hang, Vo Thanh Toan, Ngo Thao Nguyen, Lam Hai Dang and Tran Ngoc Huy** **JP: Atsushi Ishimatsu, Takahiro Ota** **Japanese Universities and Companies**: Nagasaki
3	Duration	Oct 2018 – Oct 2021
4	Main Objectives	Study on status of biodiversity of the Mekong delta to establish the determinants for conservation and appropriate natural resources management under recent disturbances (Climate changes and Human activities)
5	Focal Points	BIODIVERSITY AND NATURAL RESOURCES PROTECTION

Biodiversity status

The survey has identified **42 fish** species in 16 families, 8 orders; **43 species of mushroom** of 30 genera, 19 families; **103 plant species** of 43 families; **41 soil fauna** species of 25 families, 35 genera; **59 zoobenthos** species of 52 genera, 40 families; and **114 species of algae**. The main factors impacting to the biodiversity were potentially land use changes with high frequent disturbances and using high amount of agrochemicals. The result also found that many species can be indicators for land use change or environmental change.

COMMON SPECIES



Scatophagus argus

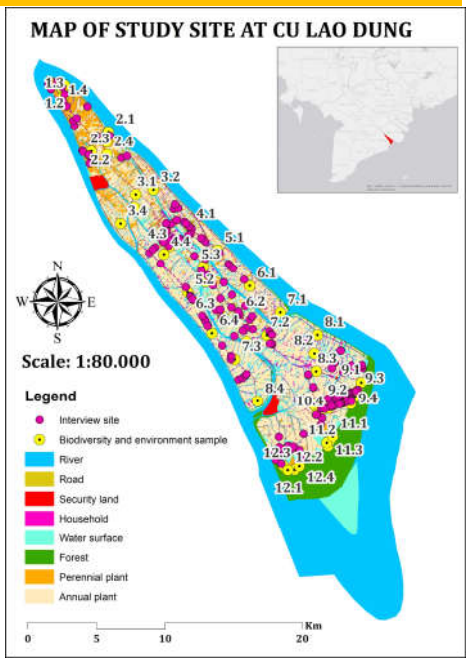
Periophthalmodon schlosseri

Nephtyidae sp.

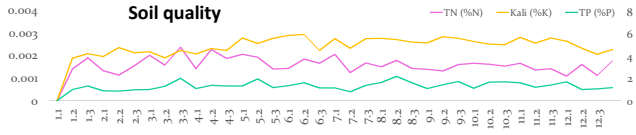
Sonneratia caseolaris (L.) Engl. 1897

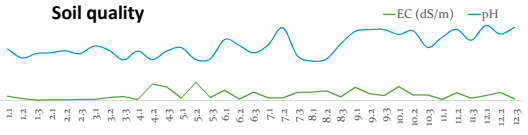
hydnellum aurantiacum

Study site map

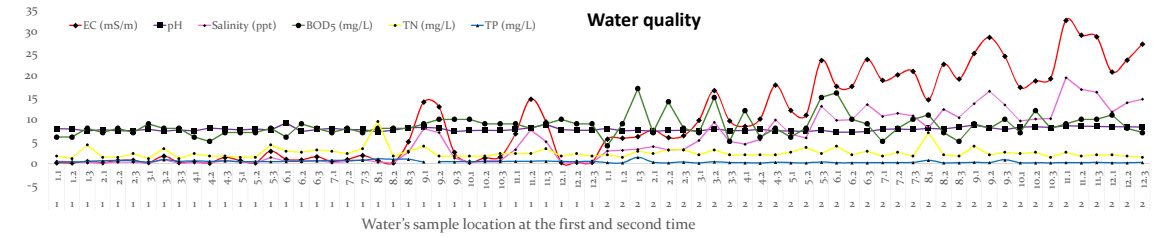


Environmental quality





Soil quality results showed the difference along the length of the island in association with unbalance of TN, TP and TK amount were resulted of unproper use in agrochemical during farming system.



Water's sample location at the first and second time

There was significantly increasing EC and Salinity parameters in dry season due to saline intrusion. By contrast, parameter of pH, TN and TP were pretty stable over time and space. Farming cultivation activities are exposing potential negative impacts on water and soil quality.

6	Perspectives	This research continues towards finalizing papers to submit Journals.