



WAGENINGEN UR
For quality of life










DYNAMICS OF RABBITFISH (*SIGANUS CANALICULATUS*, PARK) MIGRATION INTO THE TAM GIANG – CAU HAI LAGOON: PRELIMINARY FINDINGS

Ngo Thi Huong Giang ^{1,2}, Leo Nagelkerke¹, Ho Thi Thu Hoai², Nguyễn Quang Linh³, Johan Verreth¹

¹ Aquaculture and Fisheries Group, Wageningen UR, Netherlands
² Fisheries Faculty, Hue University of Agriculture and Forestry, Vietnam
³ Hue University, Vietnam

INTRODUCTION

- White-spotted rabbitfish (*Siganus canaliculatus*) is one of two siganids cultured at the Tam Giang – Cau Hai (TG-CH) lagoon
- Rabbitfish fry is collected completely from the wild
- Rabbitfish fry migrate into the lagoon in certain periods during the migration season
- **Lack of information** on fish fry **migration dynamics**

HYPOTHESIS

- Rabbitfish fry migration depends strongly on the **lunar cycle and tidal regime**



METHODS

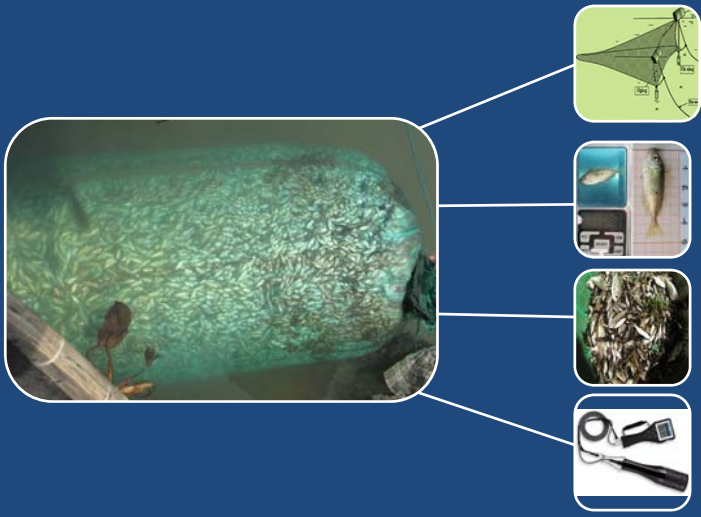
Study site




Figure 1. Tam Giang – Cai Hai lagoon, Vietnam. Source: Adapted from Cartographic Publishing House, 2002



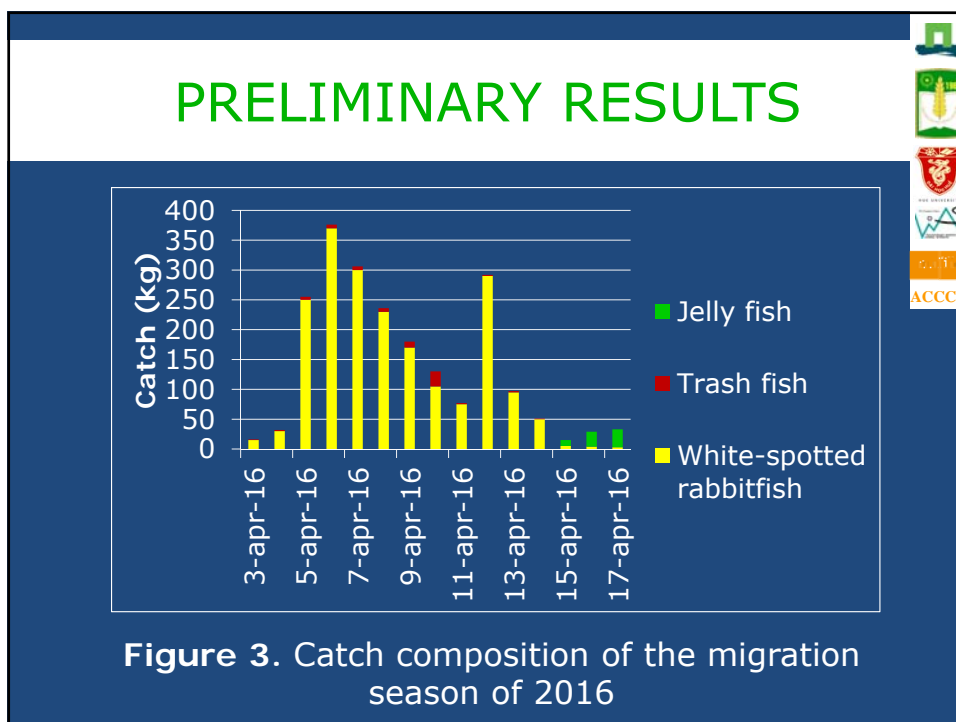
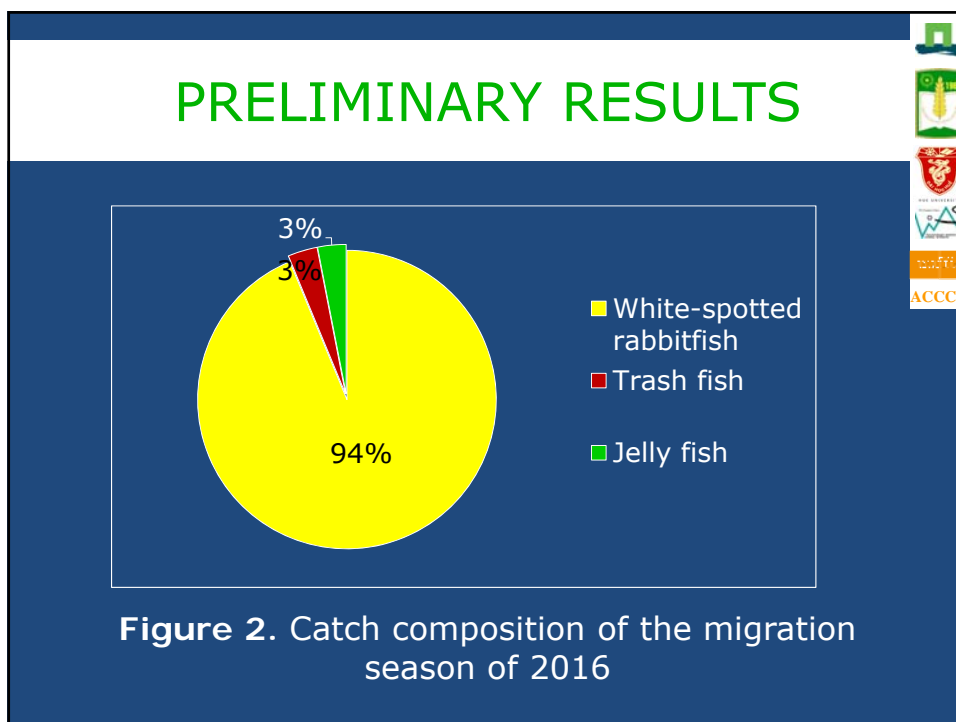
METHODS

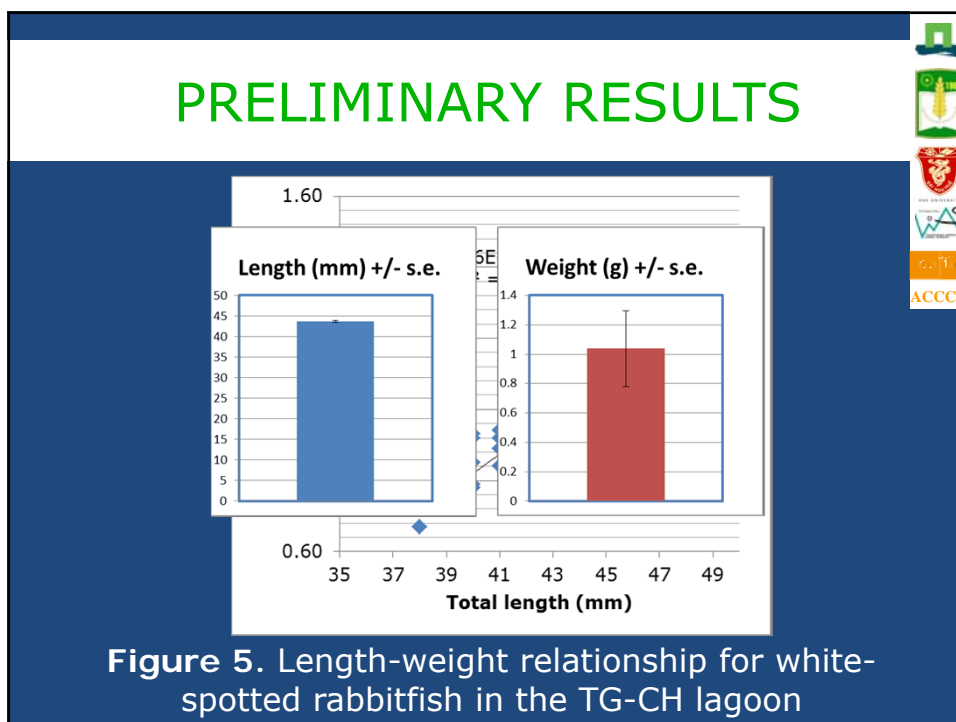
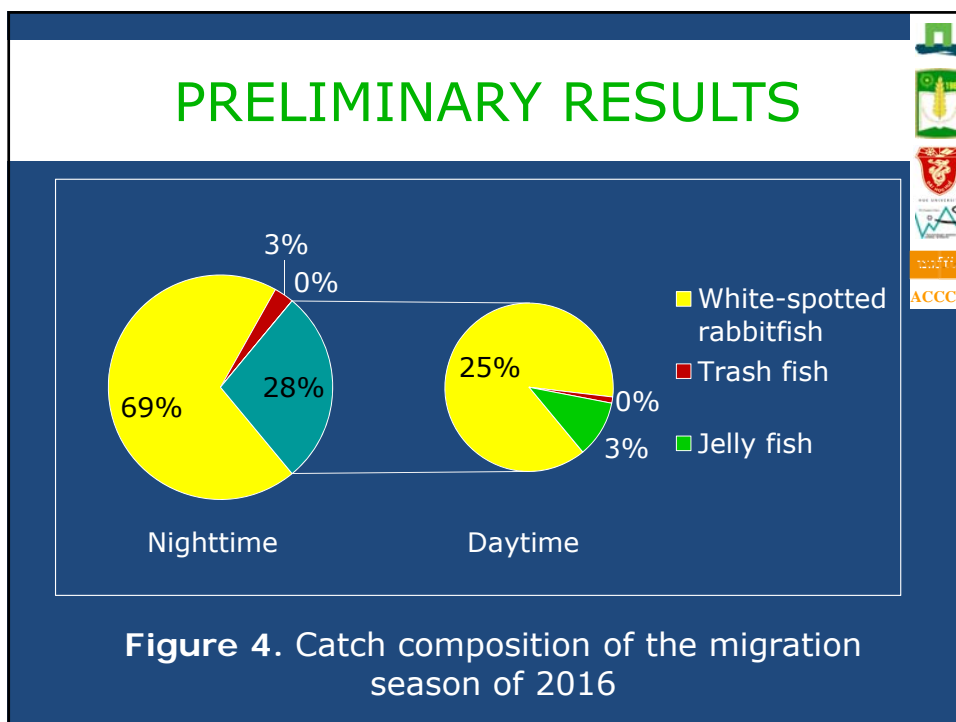




METHODS

- Using a commercial fisher's gear consisting of a fyke-net
- 6 hours of operation per day, every day during a migration period
- Body weight ($\pm 0.01g$) and total length ($\pm 1mm$)
- Estimating catch composition by buying fry and in random 100g sample from a catch
- Sampling pH, DO, EC, salinity with every operation





Conclusion

- In 2016, the rabbitfish fry migrated only for one period at the beginning of April.
- Most of the fry migrated around the first quarter of the lunar month in the nighttime.
- The catch composition in the nighttime had much less trash fish and jellyfish.
- Jellyfish only appeared in the daylight, but could make up 50 – 90% of the total catch



Conclusion

- Rabbitfish fry was very homogeneous in length and weight.
- The fry were likely all of the same age and were spawned at the same areas.



Acknowledgments

I would like to acknowledge Nuffic-ACCCU project for funding this research program and students from HUAF for helping with field work.

