

MERIP Overview and Rabbitfish Work

www.meripmicronesia.org



MERIP Background

- Not for profit corporation so operates as a business but can also apply for grant funding
- Focus on aquaculture products - marine ornamental invertebrates, bathing sponges
- Help community members establish farms, providing training, materials and marketing assistance
- Incorporate environmental, conservation, climate change, and business training into day to day activities for communities

MERIP Approach

- Due to the uniquely challenging business environment in the FSM, developed a three tier, or fully integrated, approach to sustainable development:
 - Product development
 - Community technology transfer/training
 - Marketing and market development

Products and Product Development

- Simple technologies easily adopted by community members
- Lightweight or valuable enough to be exported cost-effectively
- Environmentally sustainable technologies with a strong focus on conservation
- All products with the exception of fish are exported

Livelihoods Approach

- Coral and giant clam farming for the marine ornamental trade - export
- Sponge farming for the bath and beauty trade - export
- Rabbitfish farming for food security or income – local market



Marine Ornamentals

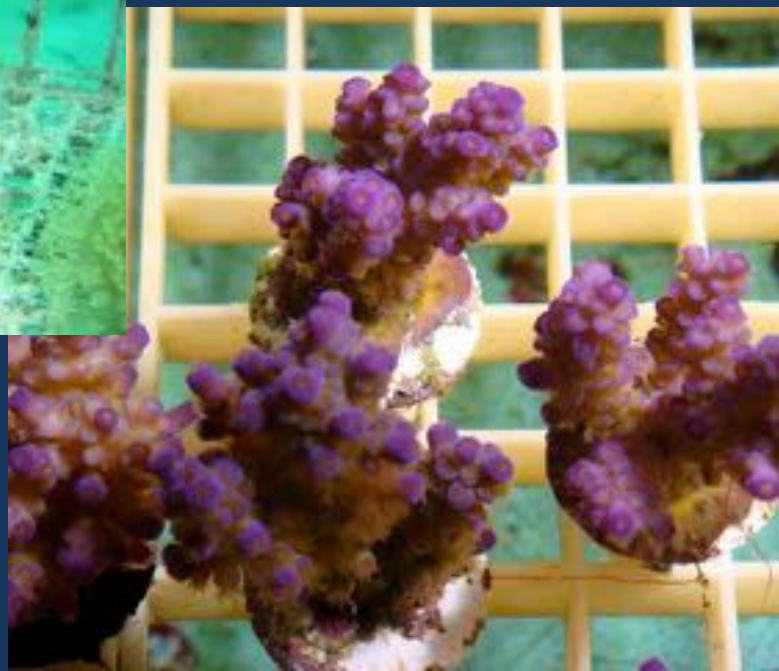
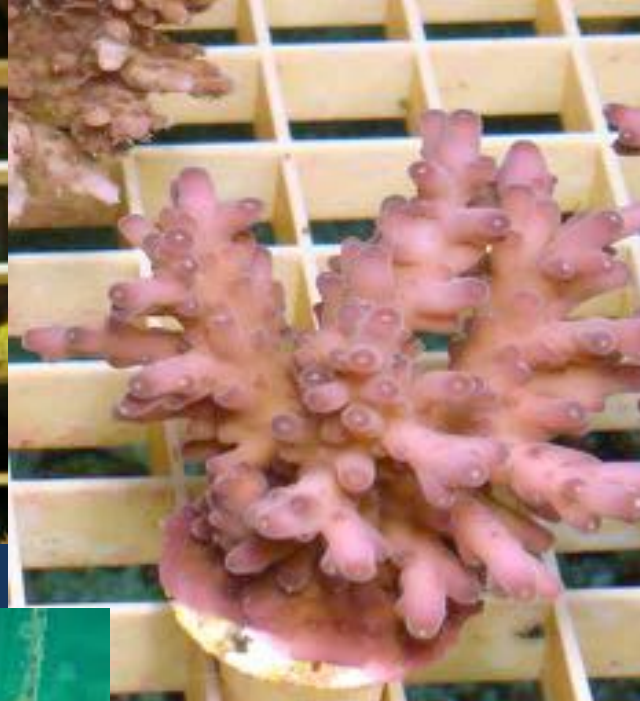
Consists of: hard and soft corals
Giant clams

Other invertebrates such as
zooanthids and corallimorphs

MERIP currently has a product list of
36 species grown locally by self-
employed farmers.

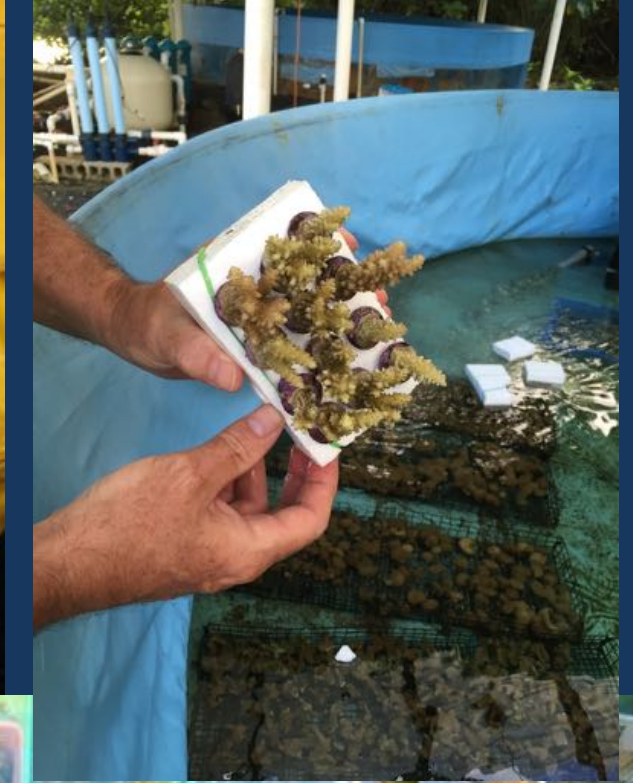
Marine Ornamentals

- Corals are easily fragmented and are fast growing
- Photosynthetic symbiosis allows them to grow well in aquaria.
- Generally colorful or have branches that move in the current













Giant Clams - primarily *Tridacna maxima* for the Aquarium Trade

- Clams are grown first at MERIP then finished in the lagoon by local farmers.







Sponge Species

- Two species of sponges are grown:
Micronesian Wool sponge – *Cosinoderma matthewsi*. Larger and coarser. 2-2.5 year grow-out

Facial sponge – *Spongia matamata* smaller and softer. 9-12 month grow-out









Sponge Farming

- **Fragmentation process – large sponges are cut up into smaller pieces and planted**
- **Almost no disease but need cleaning and maintenance**
- **Main markets are New Zealand, US, Singapore but ship to 14 locations**

Rabbitfish Farming

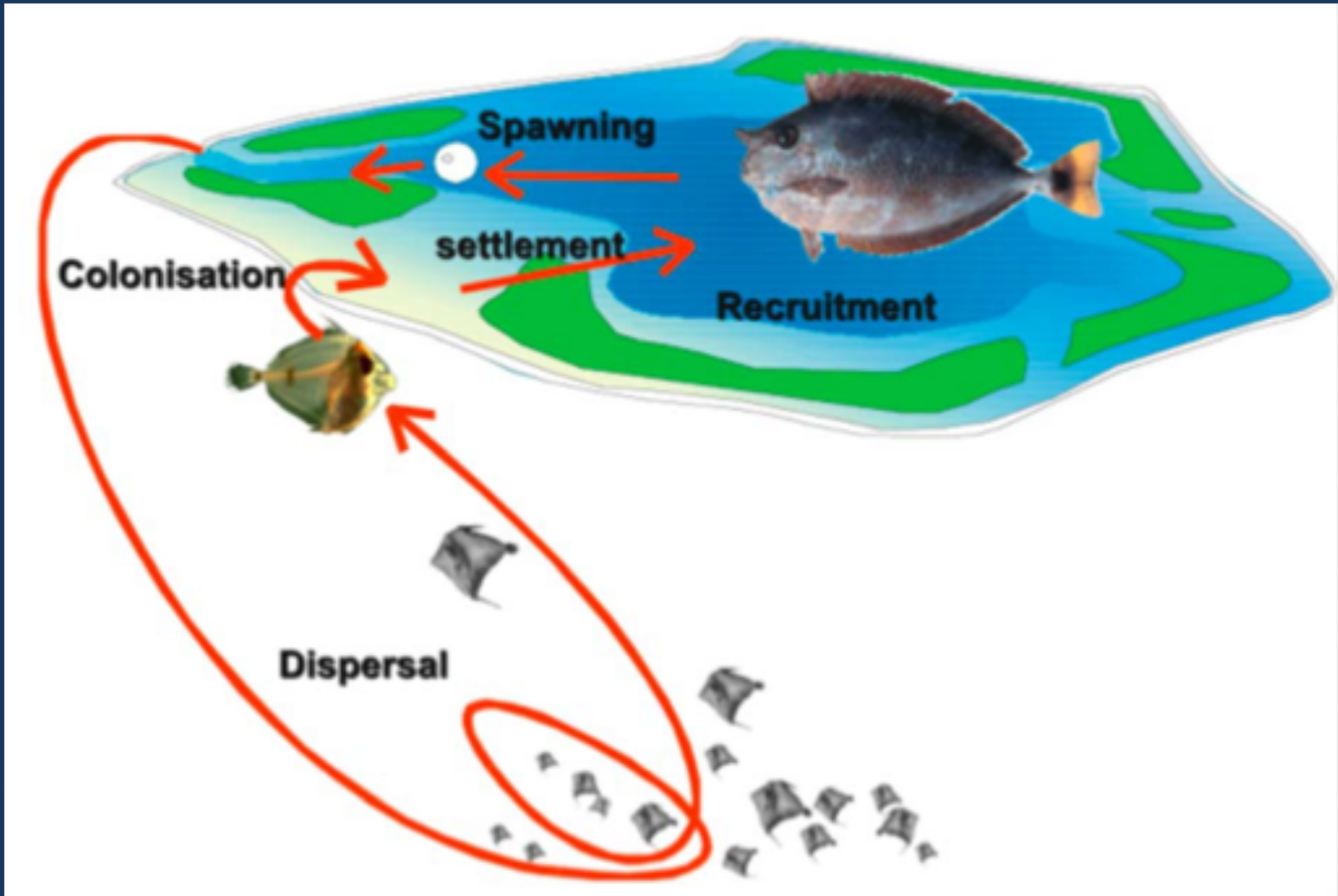
- Very promising!!!
- 3rd year of activities
- 2 species with high economic potential



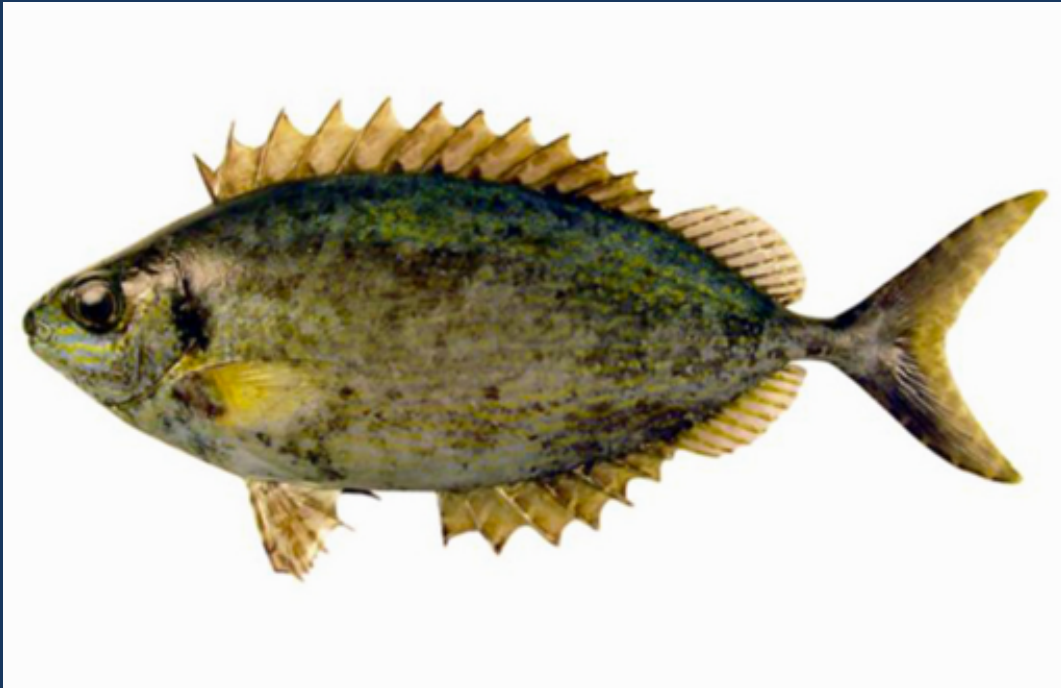
Properties

- Settle from plankton in large quantities
- Very popular food fish
- Hardy – can withstand poor water quality
- Herbivorous
- Reasonably fast growing

Oceanic Phase



S. argenteus – forktail rabbitfish



Best success to date at
MERIP

Very little information in
the literature for culture
of this species

Successfully captured
and farmed at MERIP for
3 years

Settle from plankton in
April and May

S. randalli – Randall's rabbitfish



Popular fish in Pohnpei -
Kioak

Has been captured in the
mangroves and is being
farmed

Growth rates so far are
good

Hatchery technology is
understood

Studied in Guam

Capture









Kioak capture











Easy to transport







WSARE PROJECT

- Resource manager workshop – completed
- Hatchery study tour – late 2019
- Pictorial manual – in final draft form
- Training and evaluation Pohnpei, Kosrae and Majuro – later in 2019 and into 2020



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