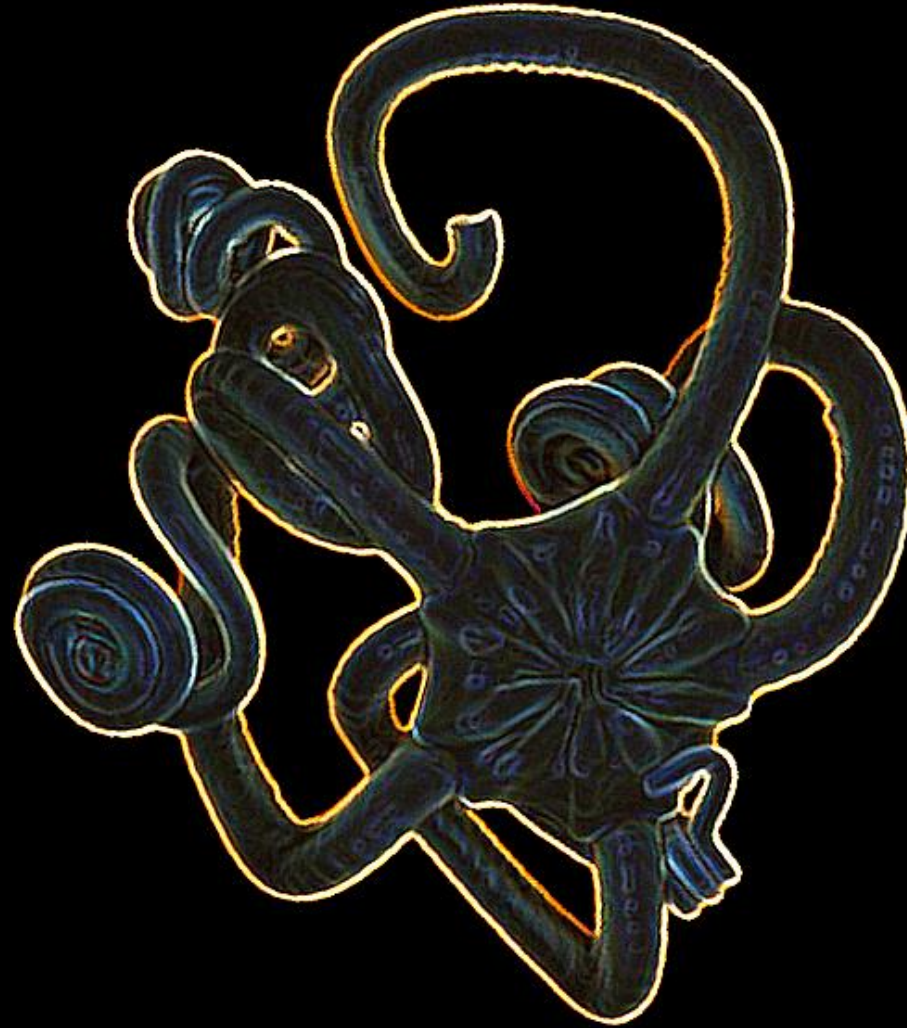


Dwarf brooder *versus* giant broadcaster:

combining genetic and reproductive data to unravel cryptic diversity in an Antarctic brittle star



**British
Antarctic Survey**

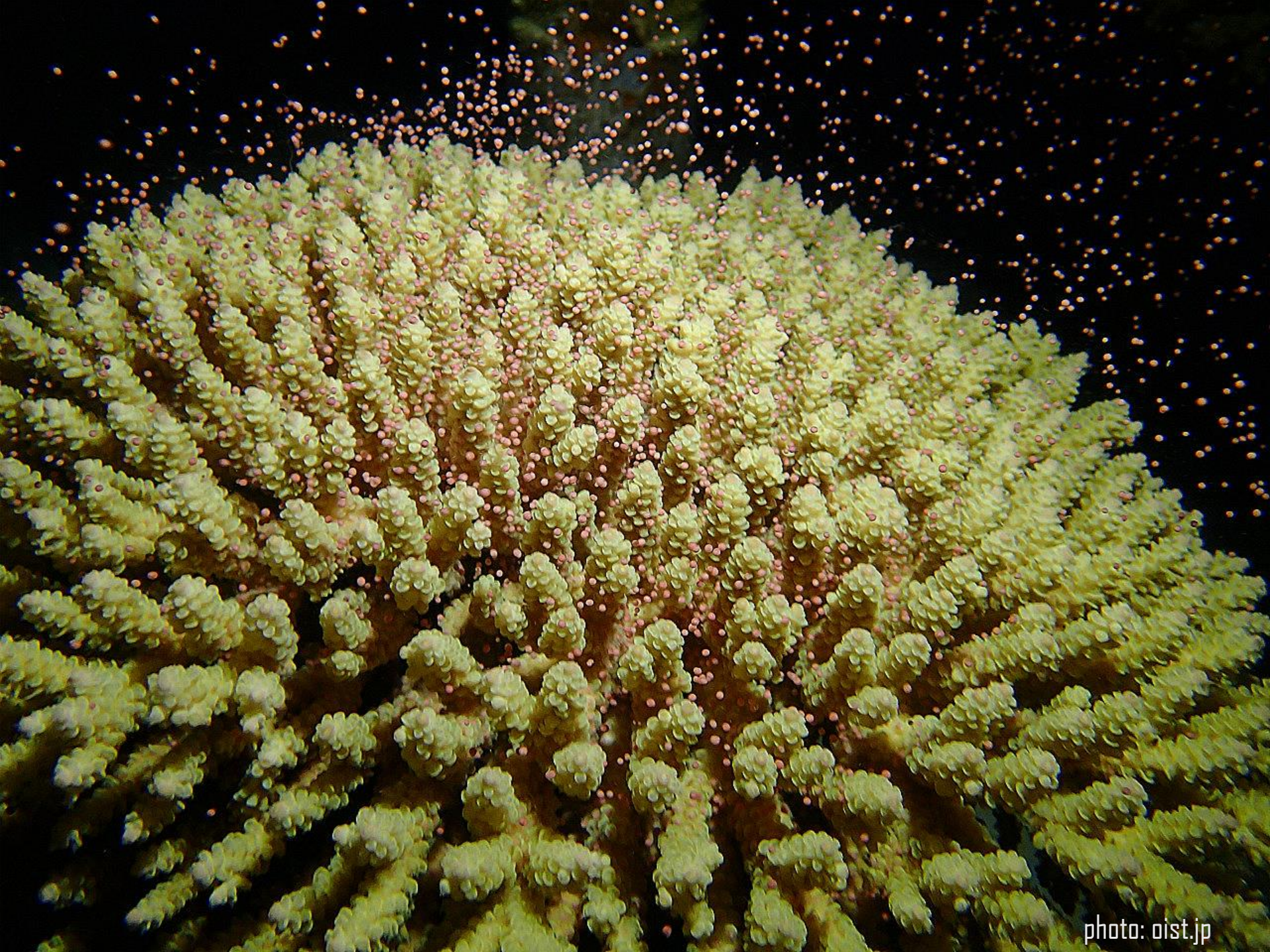
NATURAL ENVIRONMENT RESEARCH COUNCIL



**THE UNIVERSITY OF
AUCKLAND**
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

**Quentin Jossart
Mary Sewell
Chester Sands**





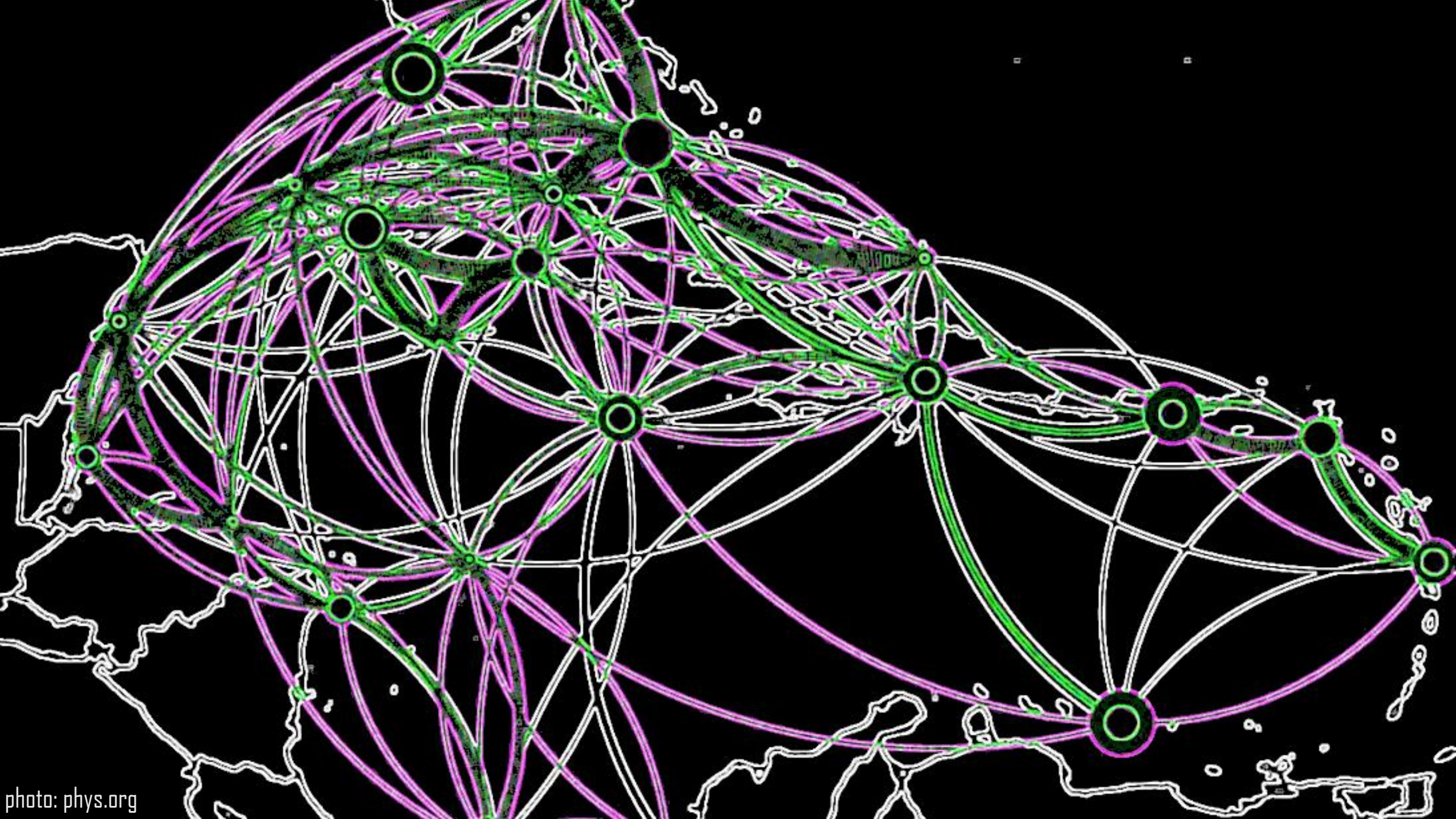
Broadcaster

photo: oist.jp

Brooder



photo: pinktankscuba.com



Poecilogony

Multiple reproductive modes in a single species





Poecilogony *versus* Crypticism

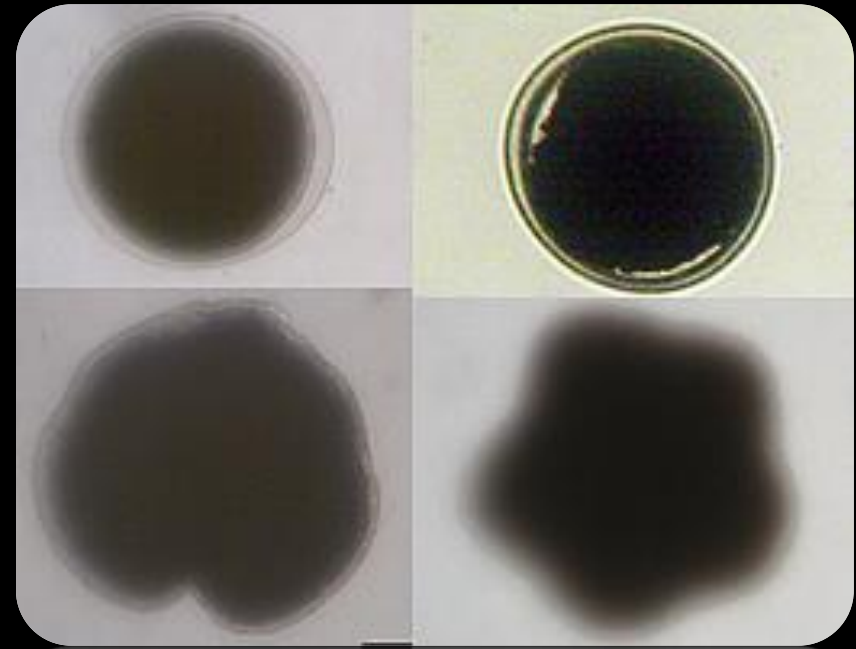
Astrotoma agassizii



Circumpolar
Subantarctic

Depth: 90-2200m





Morphological

Genetic

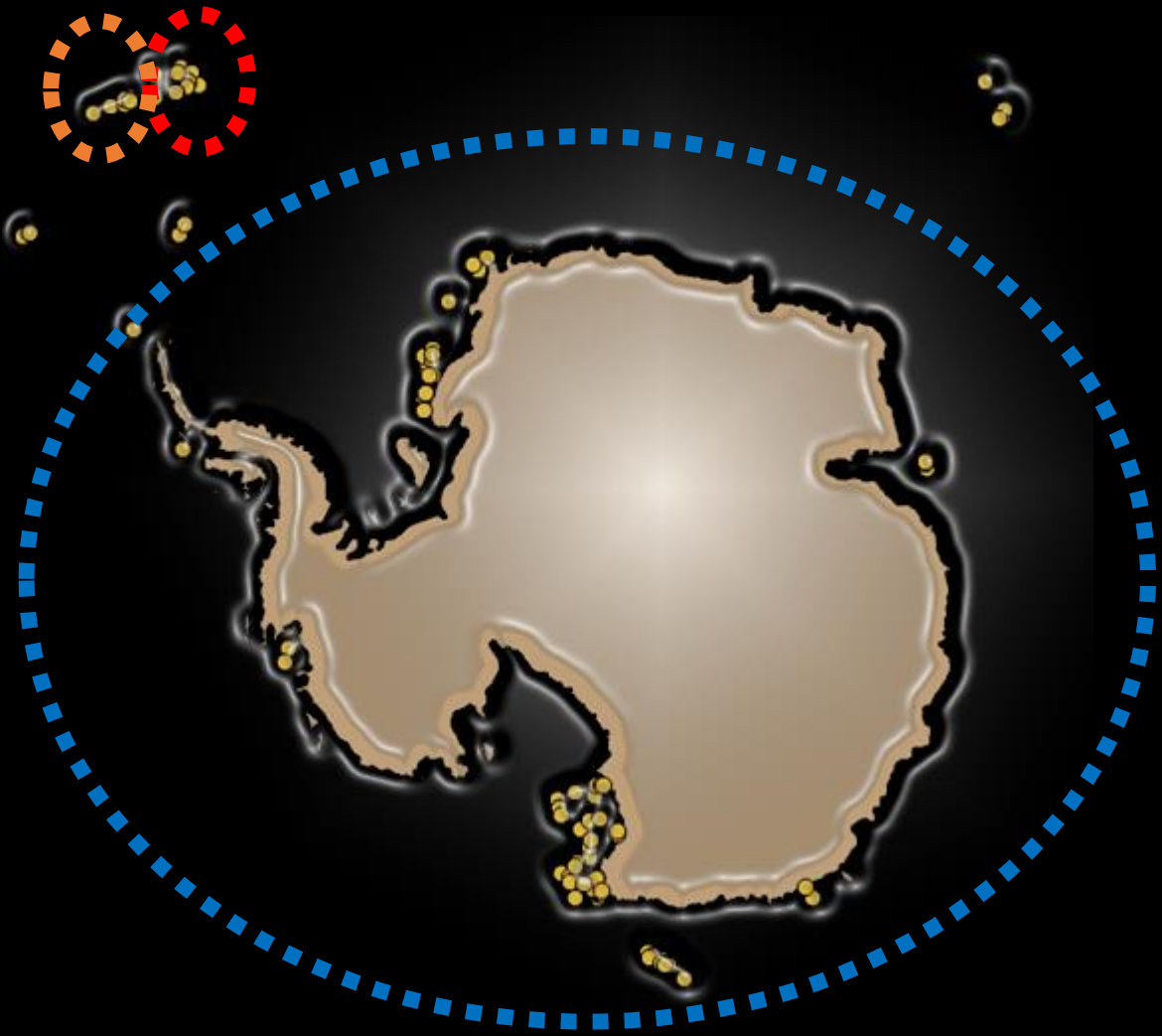
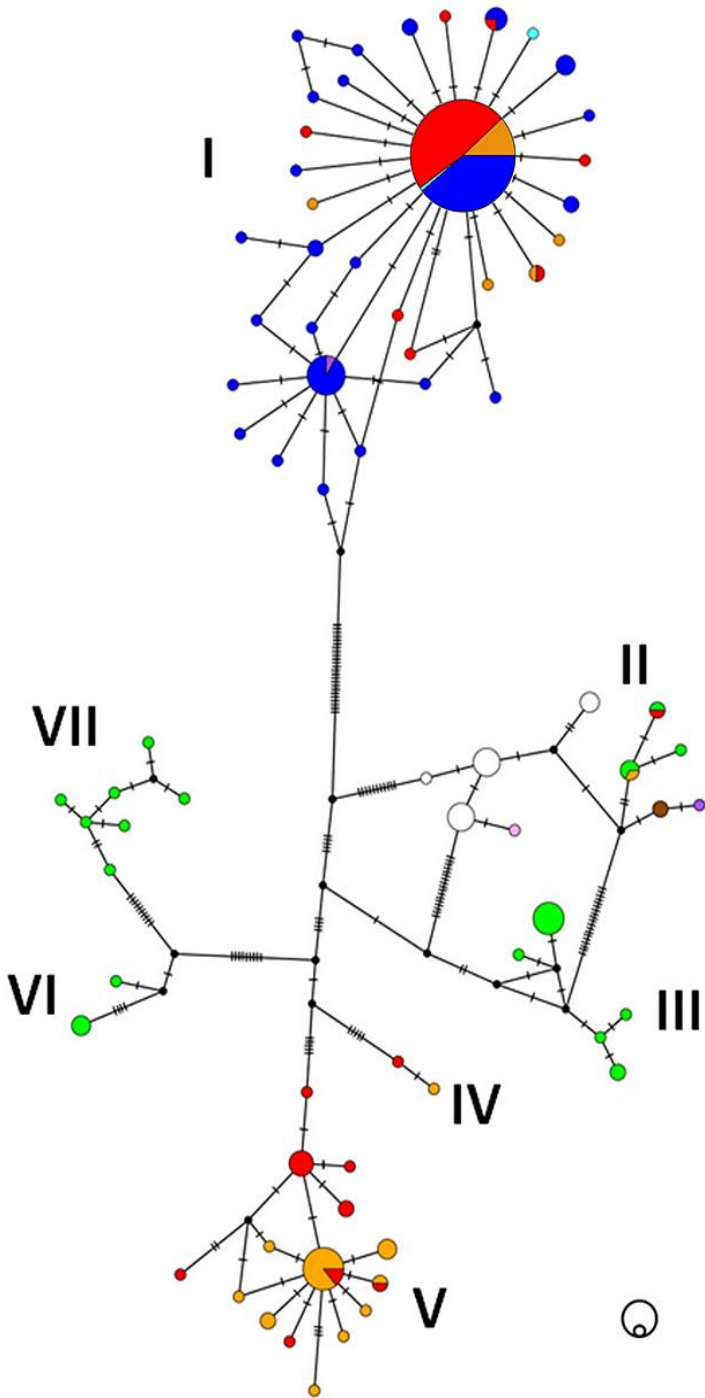


Reproductive

Legacy Litterature

Genetics

7 clades (species)





Morphology - Reproduction

Clade I



Up to 6.5 cm

Clade V



< 2.5 cm

Morphology - Reproduction

Clade V



≈ 750 μm

Clade I



≈ 450 μm



Cryptic species with distinct reproductive modes

Conservation aspects

Interest of combining different types of data



