

Feeding preferences of seven dominant fouling species: The key to their success?

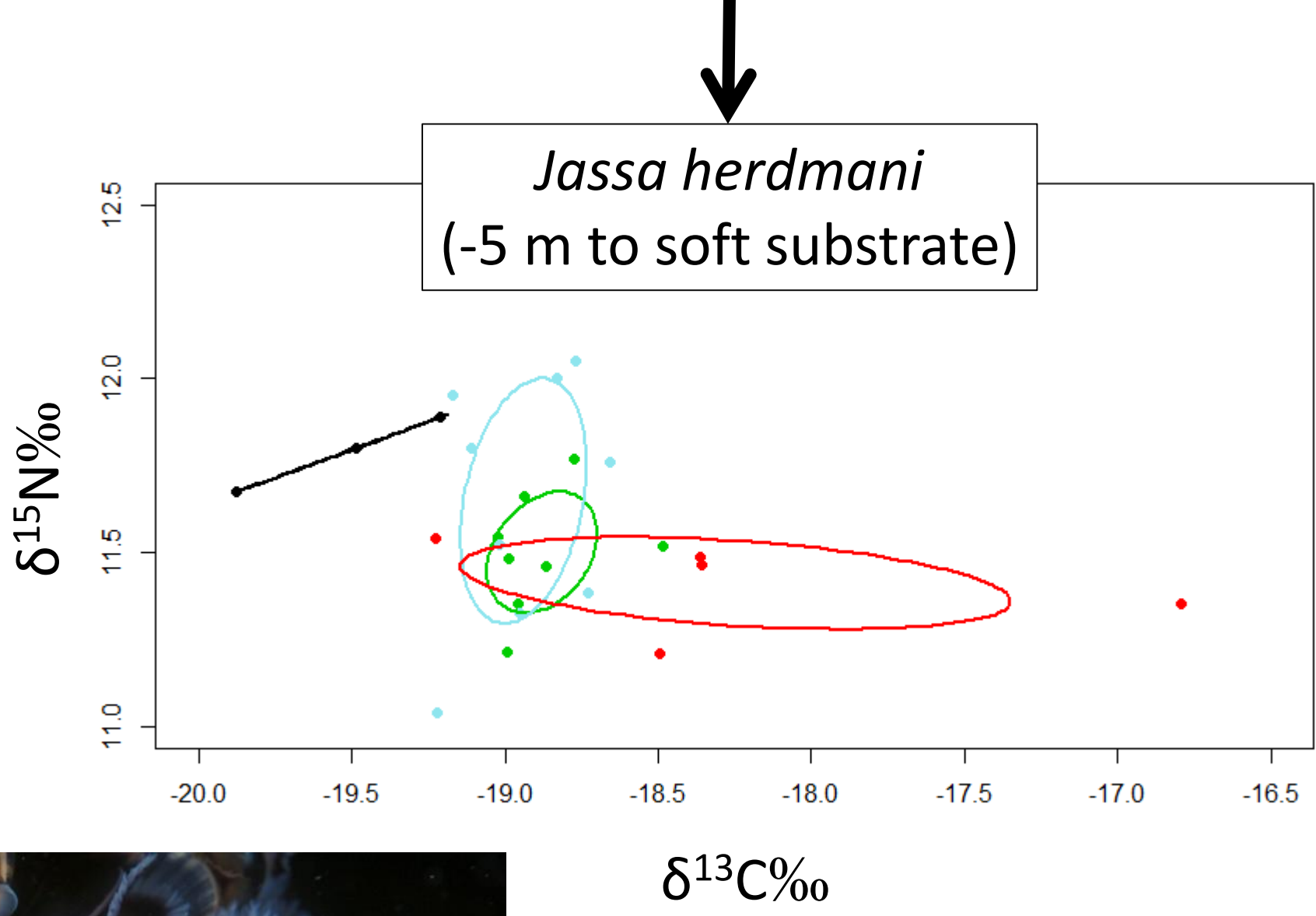
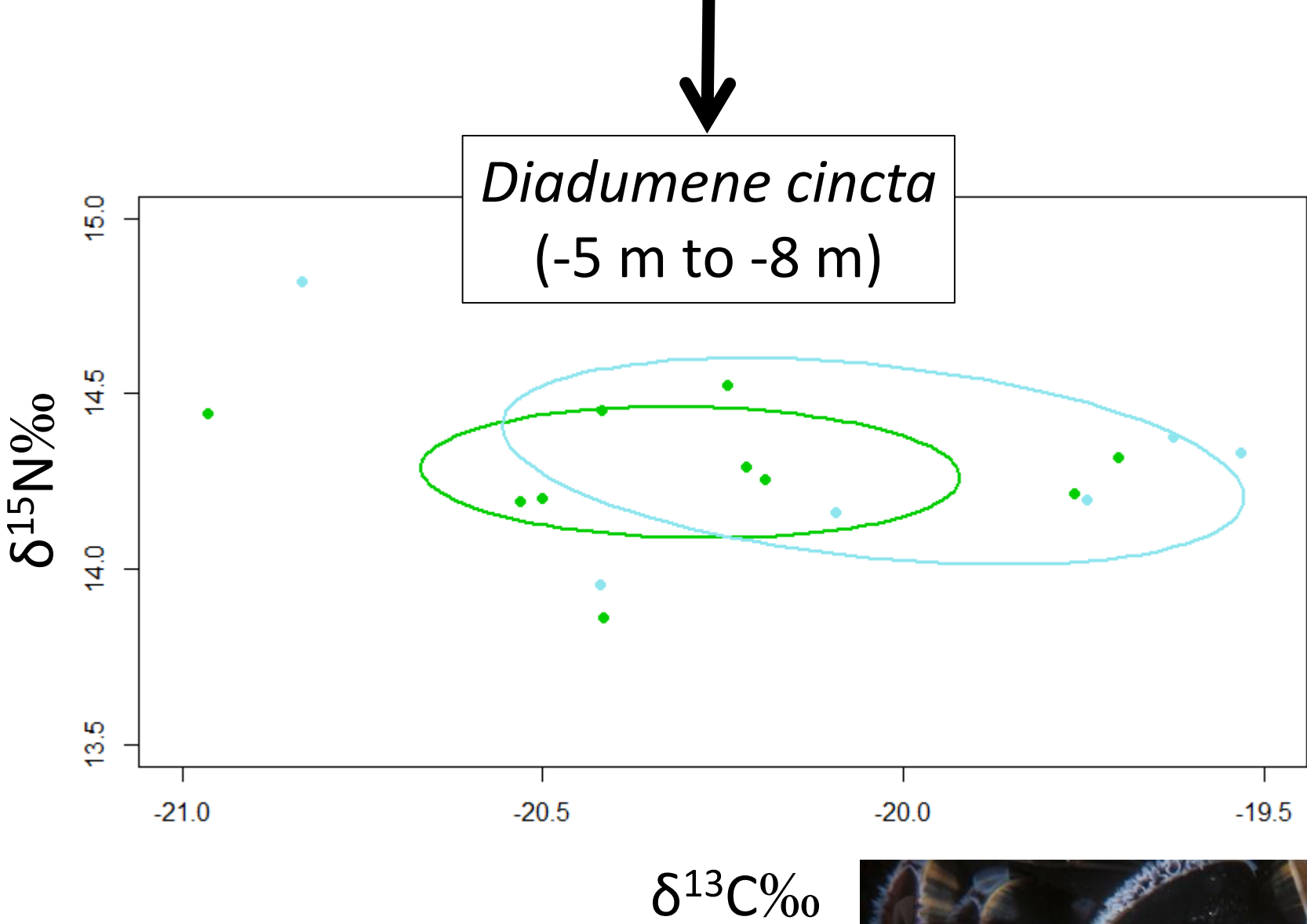
Ninon Mavraki, Steven Degraer, Jan Vanaverbeke

email: nmavraki@naturalsciences.be

Royal Belgian Institute of Natural Sciences, Operational Directorate Natural Environment, Marine Ecology and Management, Vautierstraat 29, 1000 Brussels, Belgium

Introduction

- Fouling species occur along the depth gradient of offshore wind turbines
- They are mainly suspension feeders
- Some dominant species found at different depths

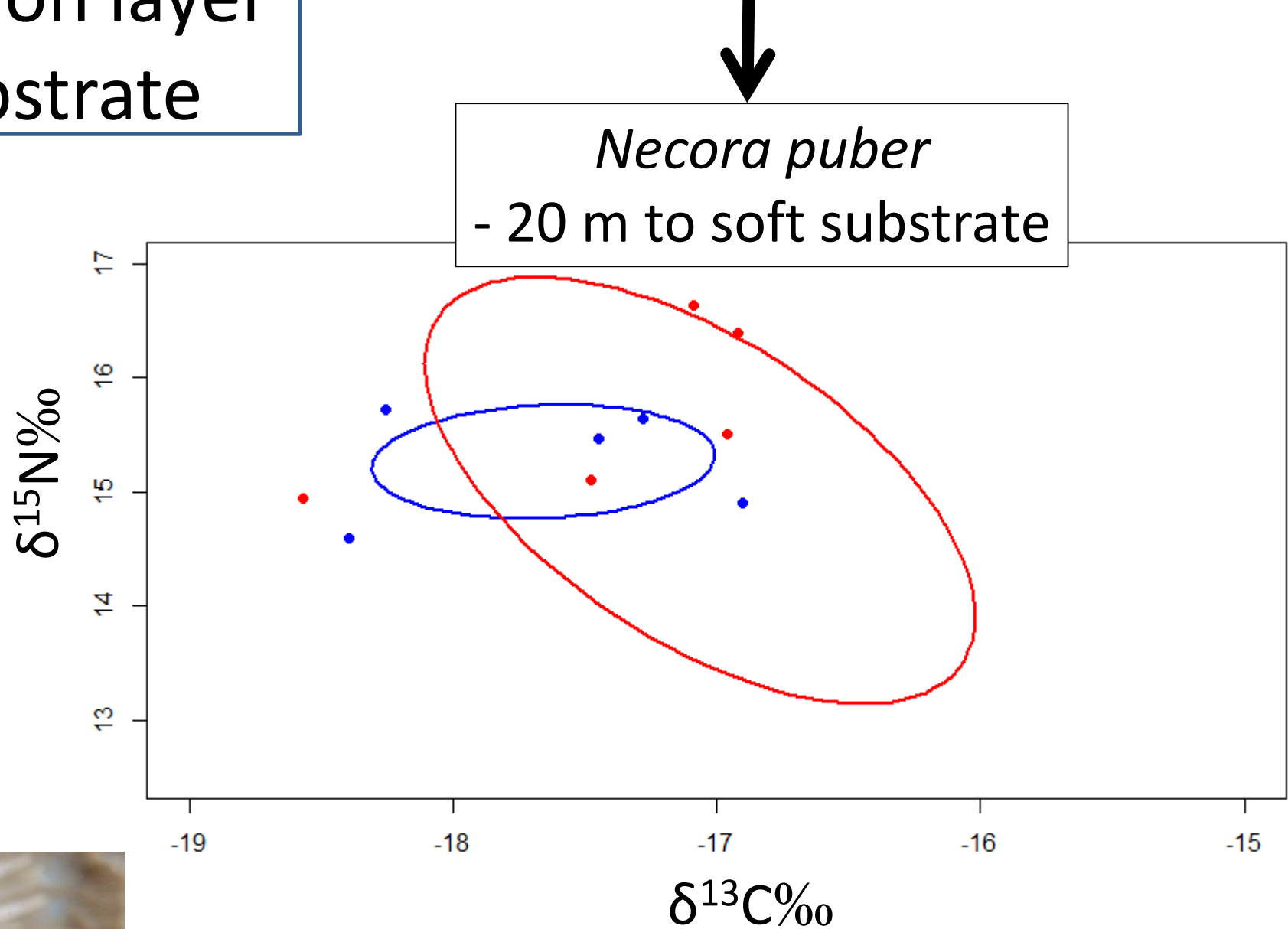
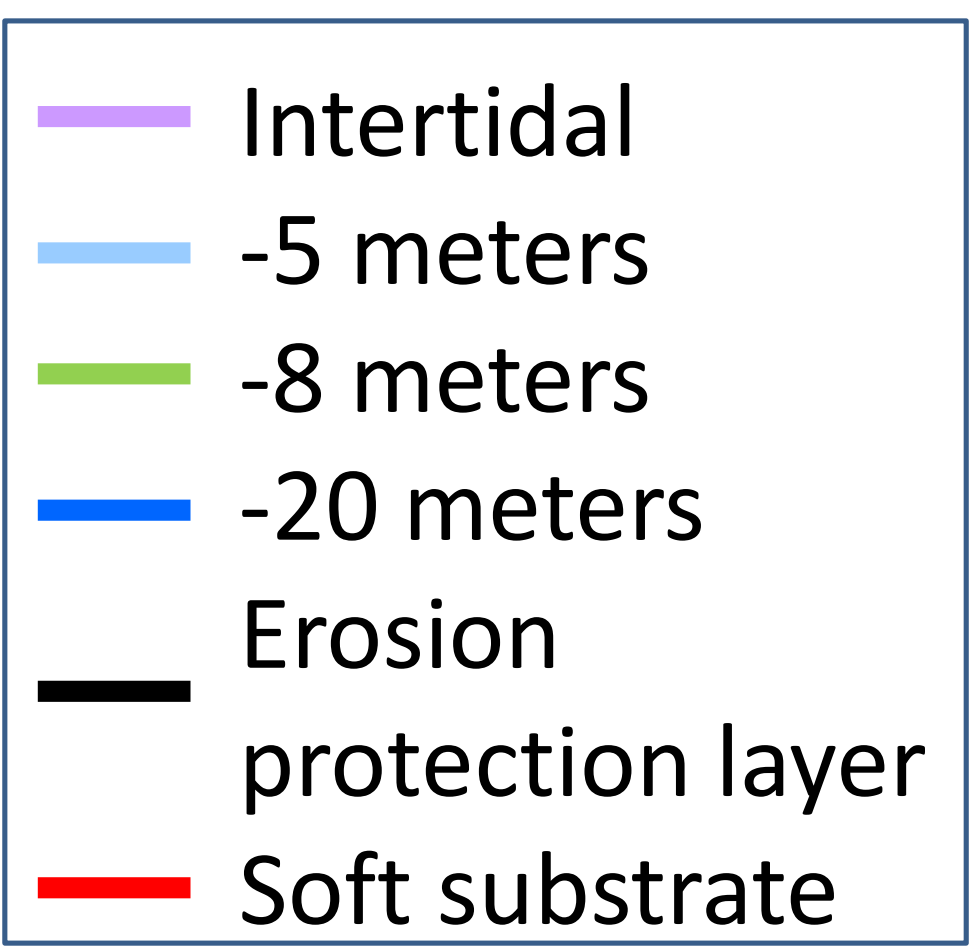
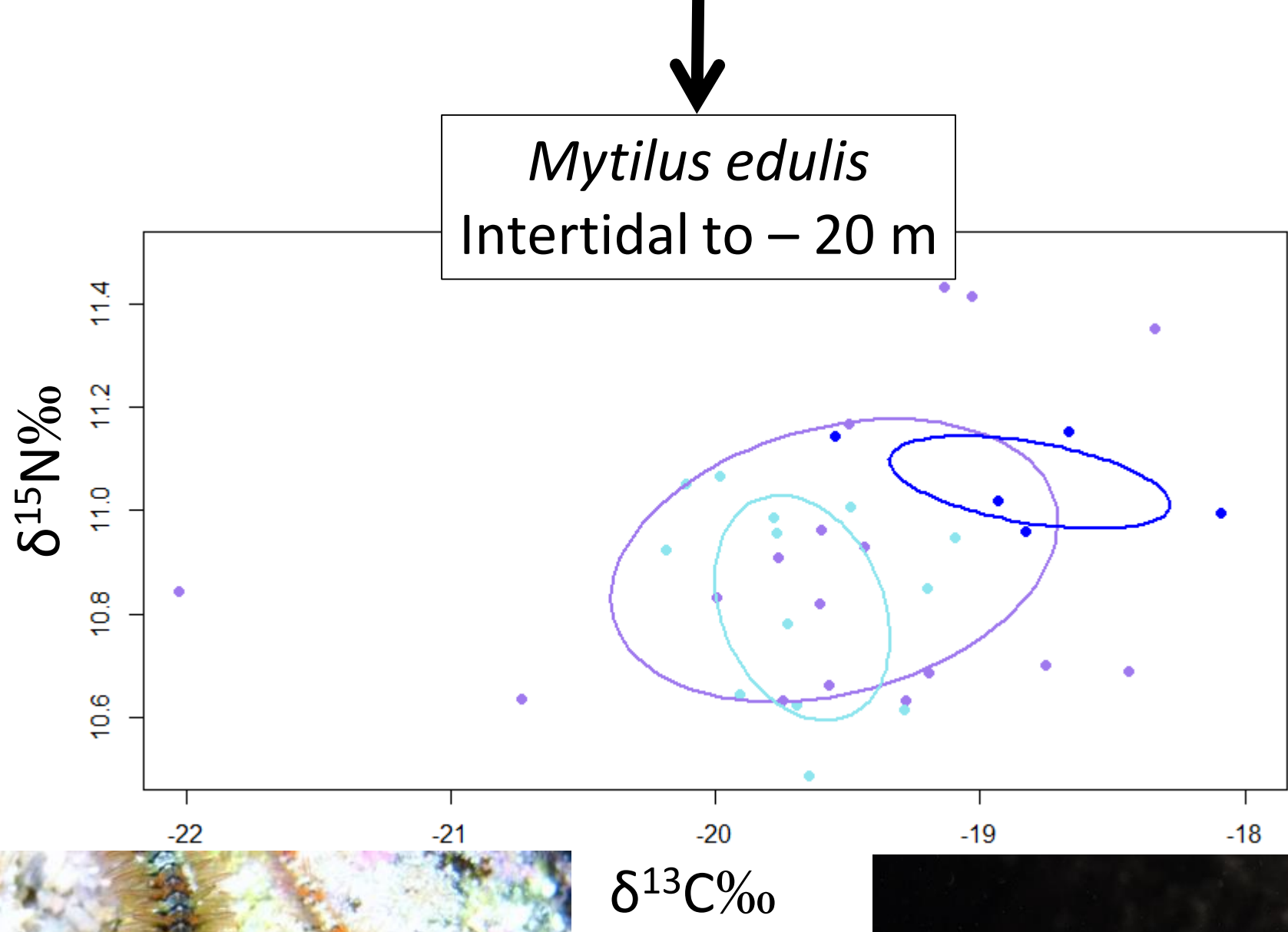
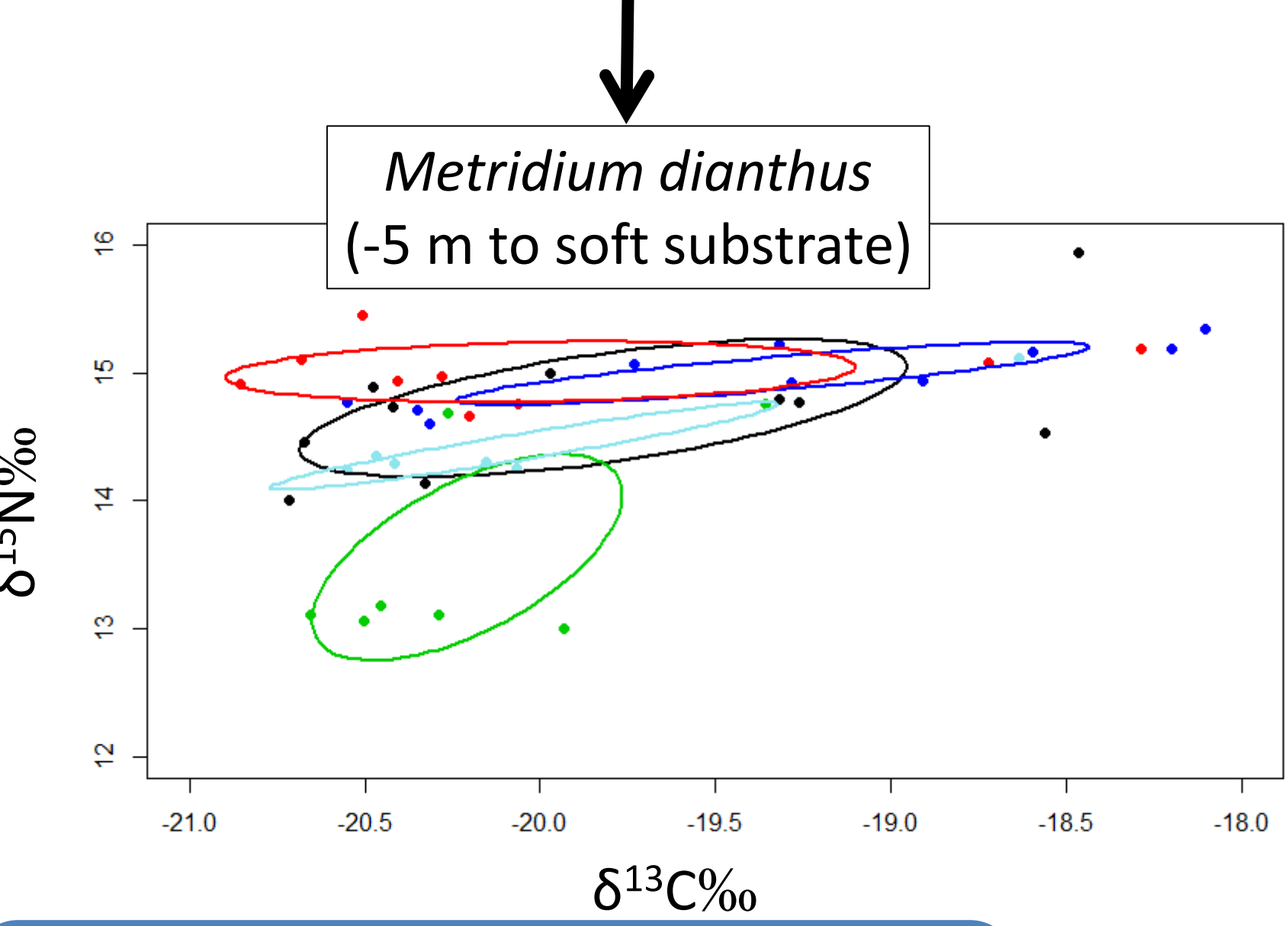
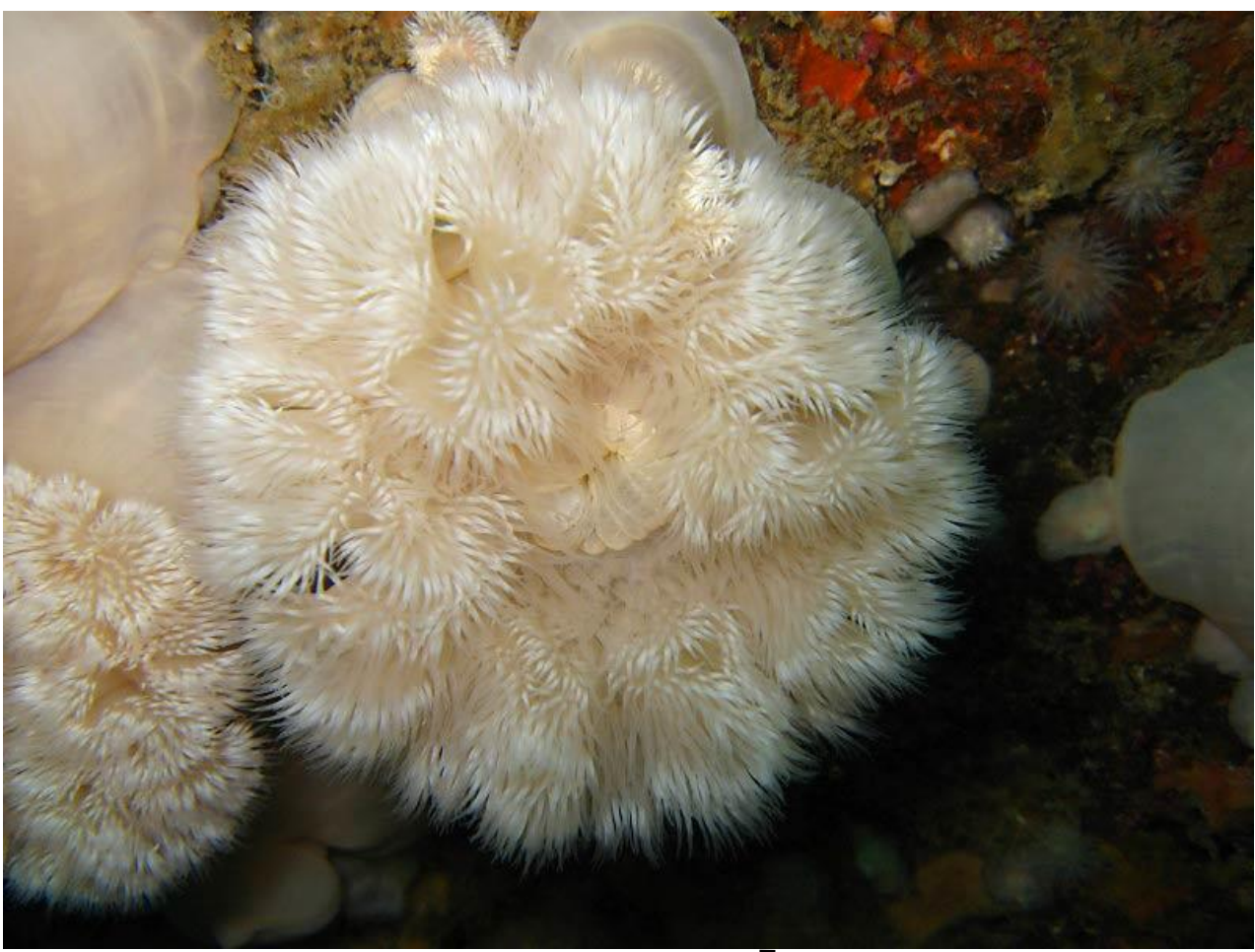


Hypothesis:

- Trophic plasticity is the key to their extended occurrence along the depth gradient

Method:

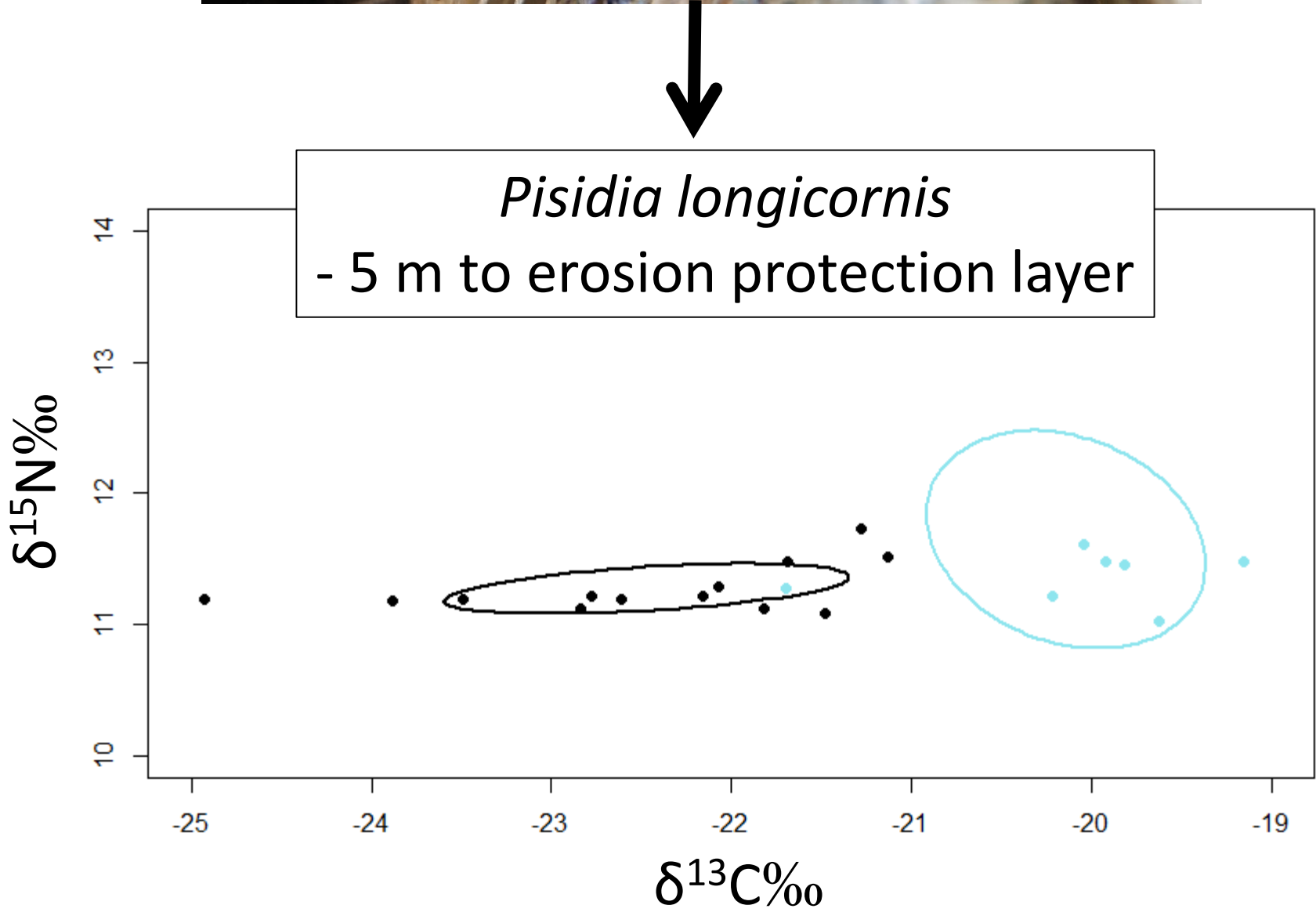
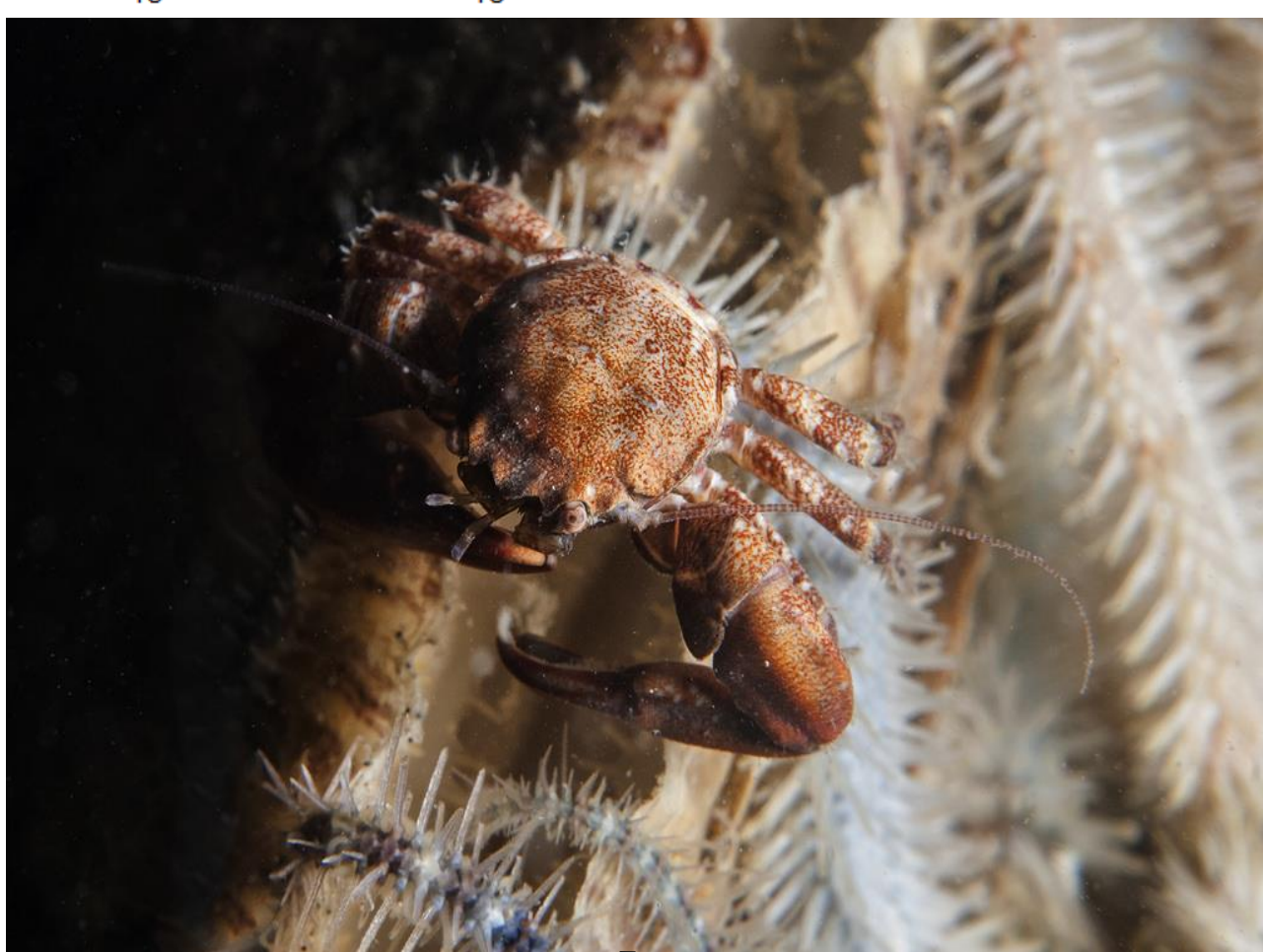
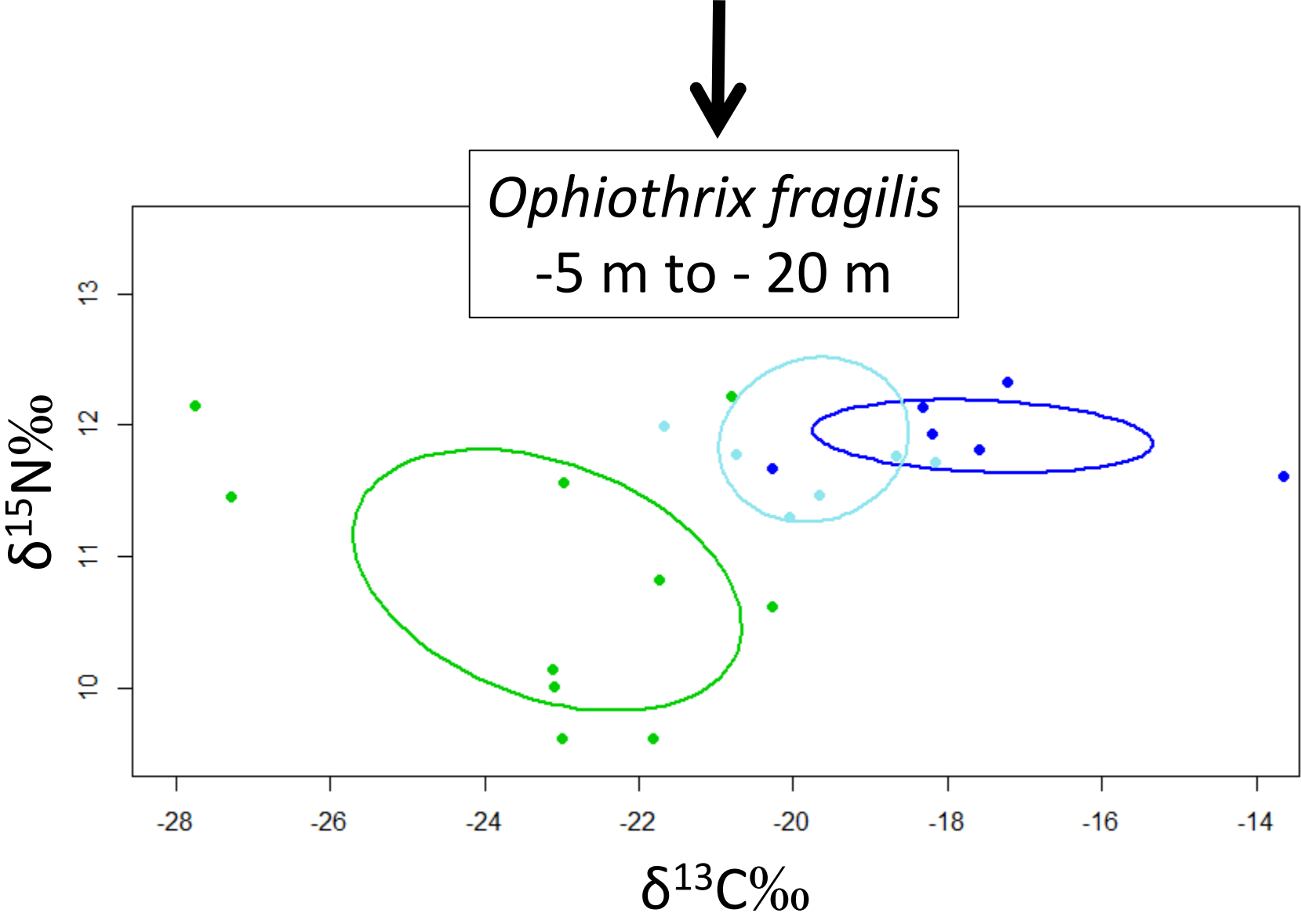
- Stable isotope standard ellipse areas overlap



Results

Distribution*	Species	Overlap
N	<i>D. cincta</i>	Major
W	<i>J. herdmani</i>	Minor
W	<i>M. dianthus</i>	Minor
N/W	<i>M. edulis</i>	Minor
N	<i>N. puber</i>	Major
W	<i>O. fragilis</i>	Minor
W	<i>P. longicornis</i>	Minor

* N: Narrow, W: Wide, N/W: Intermediate



Discussion

- All widely distributed species show high trophic plasticity
- Trophic plasticity of narrowly distributed species still to be explored