Genetic variation of the invader *Caprella scaura*: introduction events and 7-year monitoring at local scale

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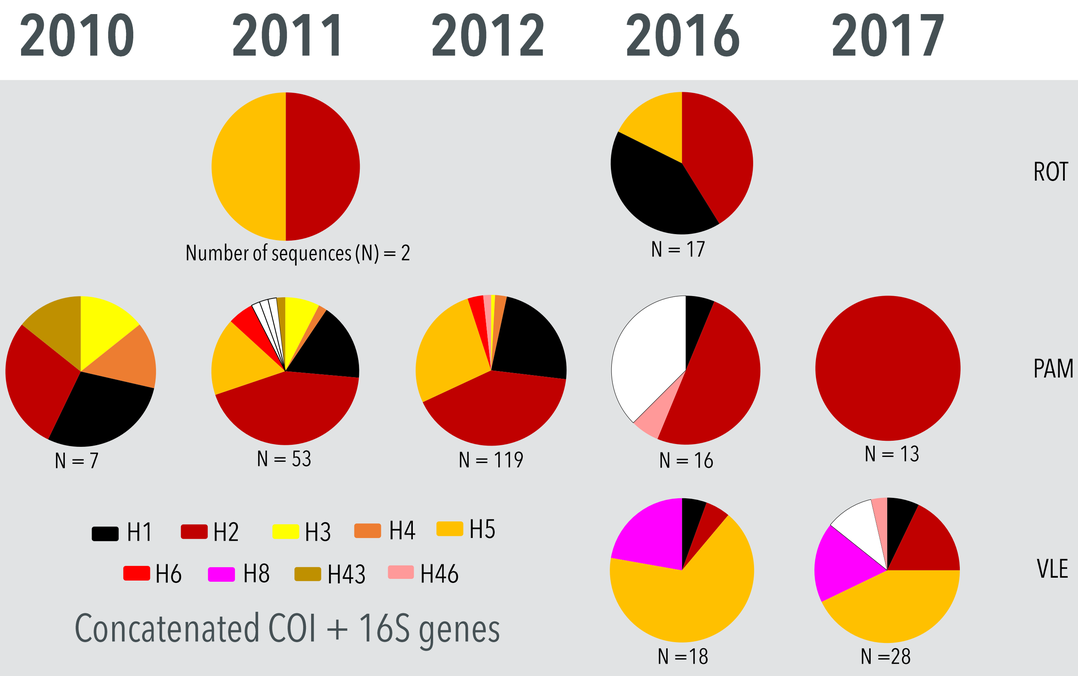
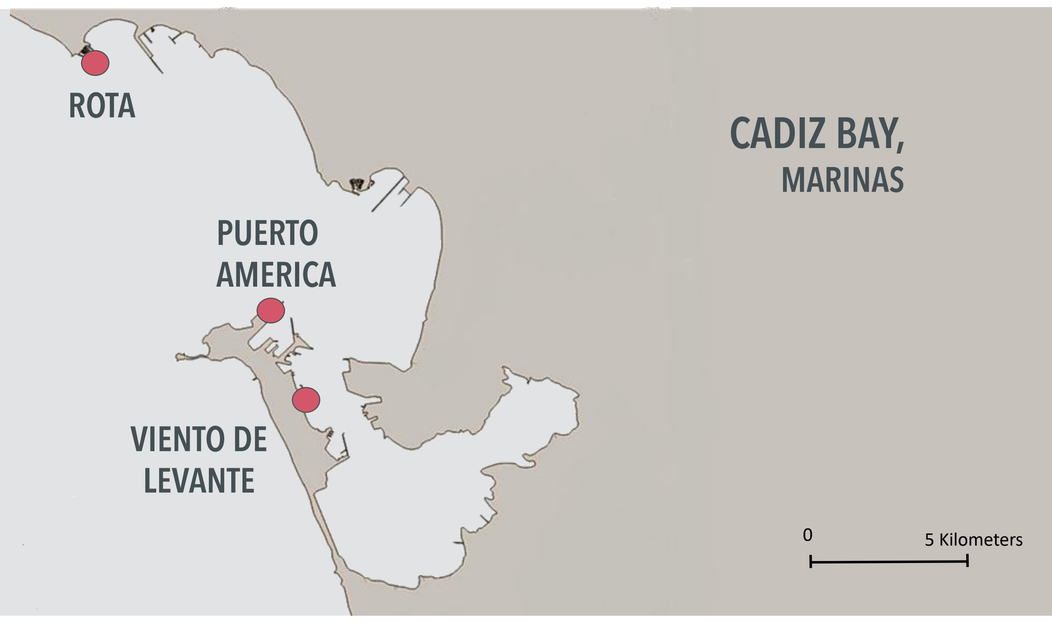
Caprella scaura (Templeton, 1836)

- Recorded in all oceans except for the Arctic
- High fecundity, trophic plasticity and aggresive intra and interspecific behaviour
- Native range under discussion: Central, southwestern Atlantic Ocean | IndoPacific and Australia | Temperate northwestern Pacific Ocean





PROGRESSIVE DECREASE IN HAPLOTYPE DIVERSITY (Hd) AND POPULATION DENSITY ACROSS YEARS; HIGH DIFFERENTIATION (F_{ST}) AT THE END OF THE MONITORING PERIOD IN PAM: ISOLATION?

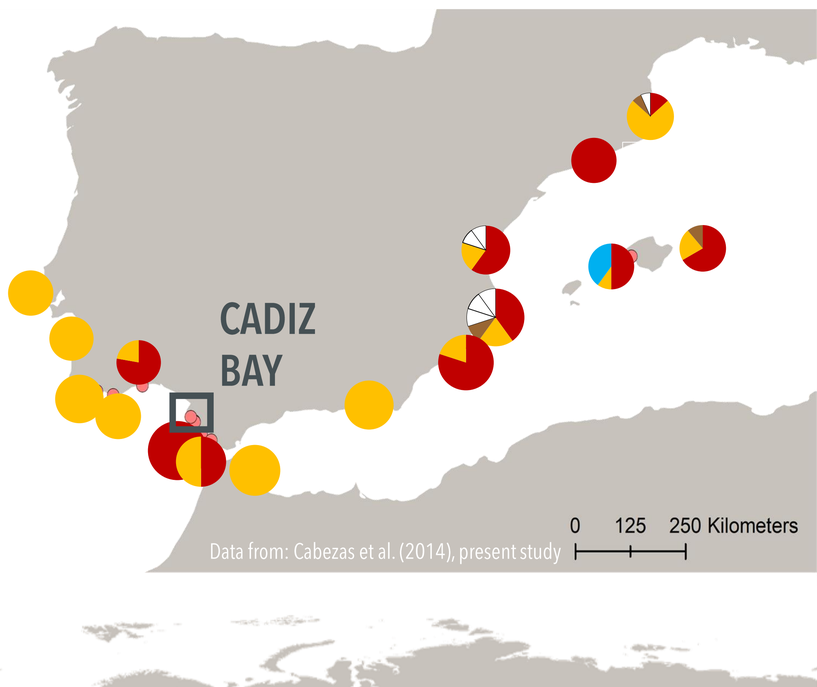
UNFAVOURABLE ENVIRONMENTAL FLUCTUATIONS

Cadiz 2017: highest T^a and rain fluctuations recorded in the last 10 years

HUMAN-MEDIATED CHANGES IN PROPAGULE PRESSURE

Vector dependant, but numerous foreign donors (shared Hp and low F_{ST}) that could easily refuel the propagule input by exchanging gene flow

↑↓ POST-ESTABLISHMENT SUCCESS



Take home messages

- A vector regulation strategy has the potential of compromising the success of established non-native populations, when they undergo vulnerability periods due to the challenging conditions of marinas.
- The use of molecular tools in a time series approach (not yet well-extended) could serve management, by identifying the ideal time window to put in action contingency/eradication measures so that they are cost-effective.