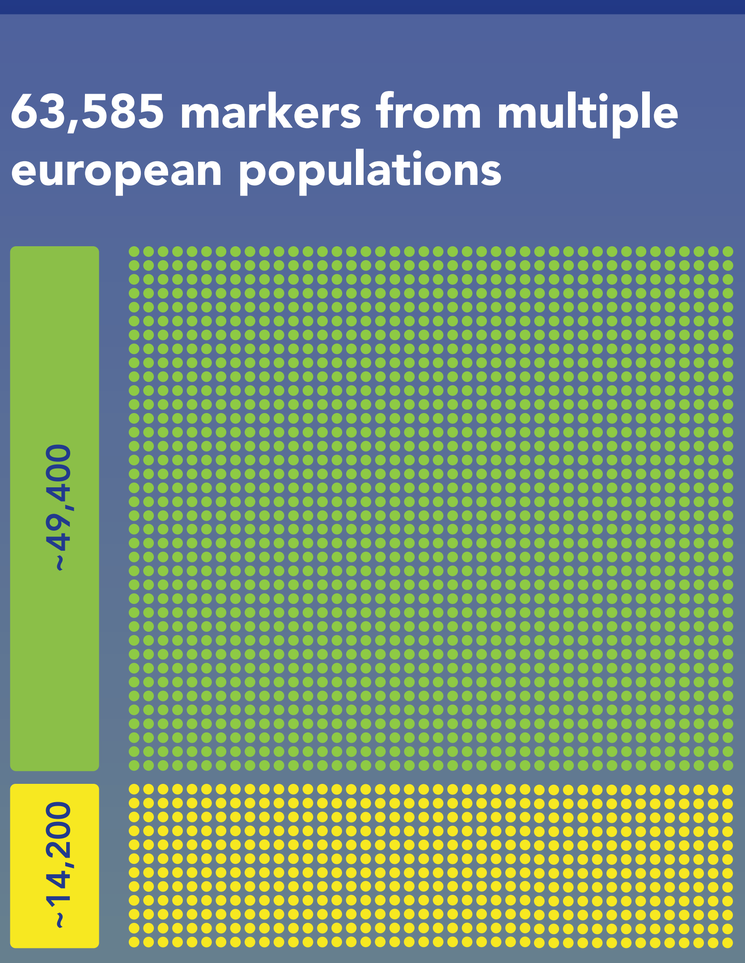
IGNITION

A DUAL-SPECIES SNP ARRAY TO SUPPORT SELECTIVE BREEDING FOR HEAT STRESS AND DISEASE RESISTANCE IN *RUDITAPES PHILIPPINARUM* AND *RUDITAPES DECUSSATUS*

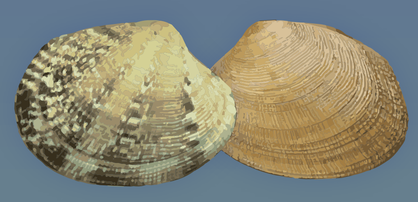
1 DEVELOPMENT OF THE DUAL-SPECIES SNP ARRAY

63,585 markers from multiple european populations





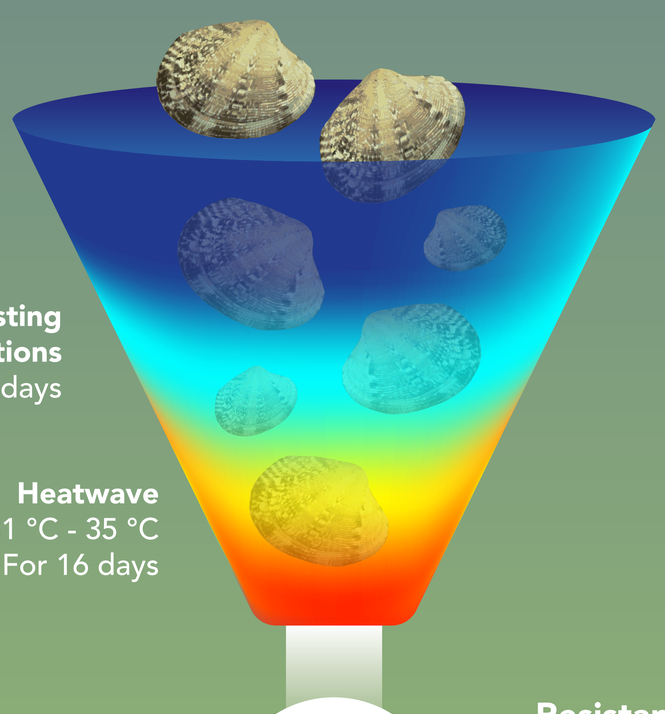
RUDITAPES PHILIPPINARUM
Manila clam



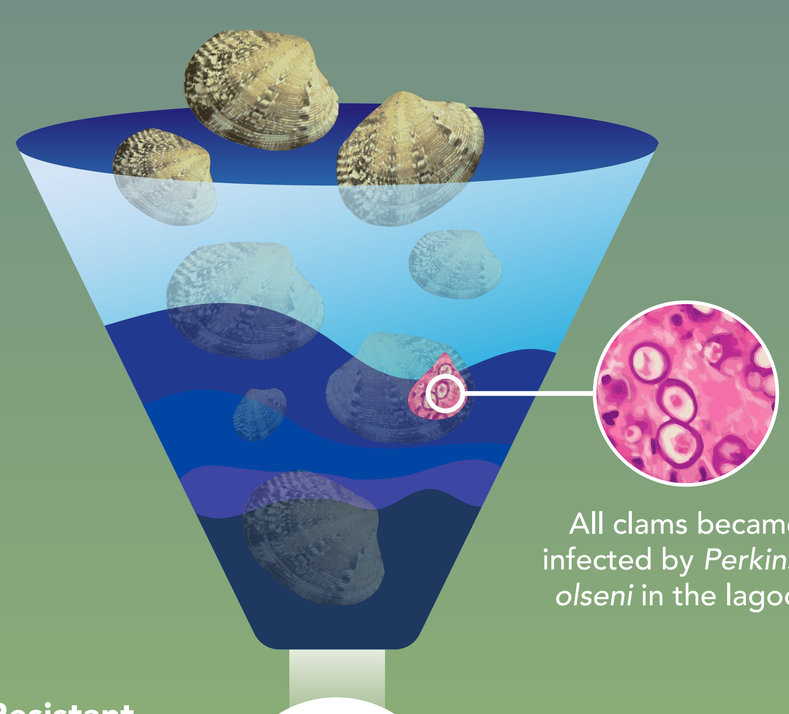
RUDITAPES DECUSSATUS
Grooved carpet shell

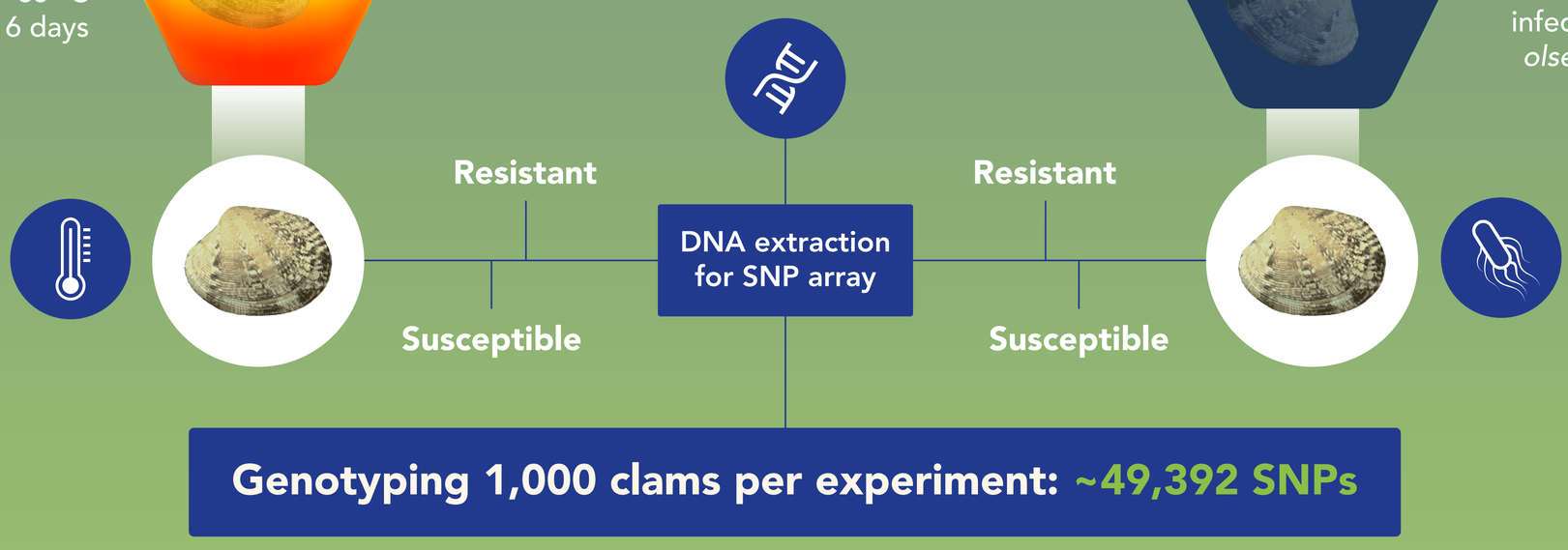
2 SNP ARRAY USED IN TWO CHALLENGES WITH MANILA CLAMS

Heatwave Lab Experiment
~2,000 clams



P. olseni Venice Lagoon Experiment
~10,000 parasite-free clams





Genotyping 1,000 clams per experiment: ~49,392 SNPs

3 FROM DATA TO BREEDING OPPORTUNITIES

Moderate heritability for:

- **Growth performance**
- **Resistance to heat stress**
- **Resistance to *P. olseni* infection**

SNP array performance:

- **Robust and practical platform for implementing long-term genetic improvement programs**

LEADING TO MORE RESILIENT AND SUSTAINABLE CLAM PRODUCTION SYSTEMS ALIGNED WITH THE EMERGING HATCHERY-BASED SUPPLY CHAIN IN EUROPE

Authors: Ana Visković, Massimo Milan, Luca Peruzza, Tim Bean, Sergio Fernández Boo, and Benjamin Costas

Read the papers

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