THE CENTER FOR AQUACULTURE TECHNOLOGIES

Pacific Oyster

C. gigas

AQUAarray Low Density
Number of SNPs: Up to 1,000

- Genetic Overview (GO) Analysis
- Parentage Assignment
- Marker Assisted Selection
- Identification of Genetic Sex
- Species / Strain / Population Identification
- Traceability Management

NOTE: LD applications vary from species to species.
Please contact us for details.

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AQUAarray Medium Density
Number of SNPs: Up to 10,000

- Genetic Overview (GO) Analysis
- Parentage Assignment
- Marker Assisted Selection
- Identification of Genetic Sex
- Species / Strain / Population Identification
- Traceability Management
- GWAS
- Genomic Selection
- Marker Discovery

AQUAarray High Density
Number of SNPs: Over 10,000

- Genetic Overview (GO) Analysis
- Parentage Assignment
- Marker Assisted Selection
- Identification of Genetic Sex
- Species / Strain / Population Identification
- Traceability Management
- GWAS
- Genomic Selection
- Marker Discovery

MORE GENOTYPING PANELS
• Axiom™ Oyster Genotyping Array

Read more info on Genotyping Tools.

Summary:

Every producer will benefit from using DNA technology in their breeding program. The level of benefit and the type of return on investment will depend on the tool – whether low density (LD), medium-density (MD), or high-density (HD) - that is used. Regardless of the tool, the application of DNA technology adds precision to a selection decision.
Low Density (LD): for those just starting in genomics without any knowledge of which populations they have (i.e., species or strains), we recommend a low-density panel with less than 200 SNPs. It provides insights into the genetic architecture of the population and a basis

for relatedness and inbreeding. This panel also allows for parentage testing, an important step in the calculation of EBVs (estimated breeding values), which is another way of saying genetic merit.