



BAKKAFROST
ESTABLISHED 1968

SUPERIOR
QUALITY
SALMON



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FØROYSKI FISKURIN VARÐAR OG MÁL

D. Færø, M. Luqman og J. Eysturskarð, 03/03/2023

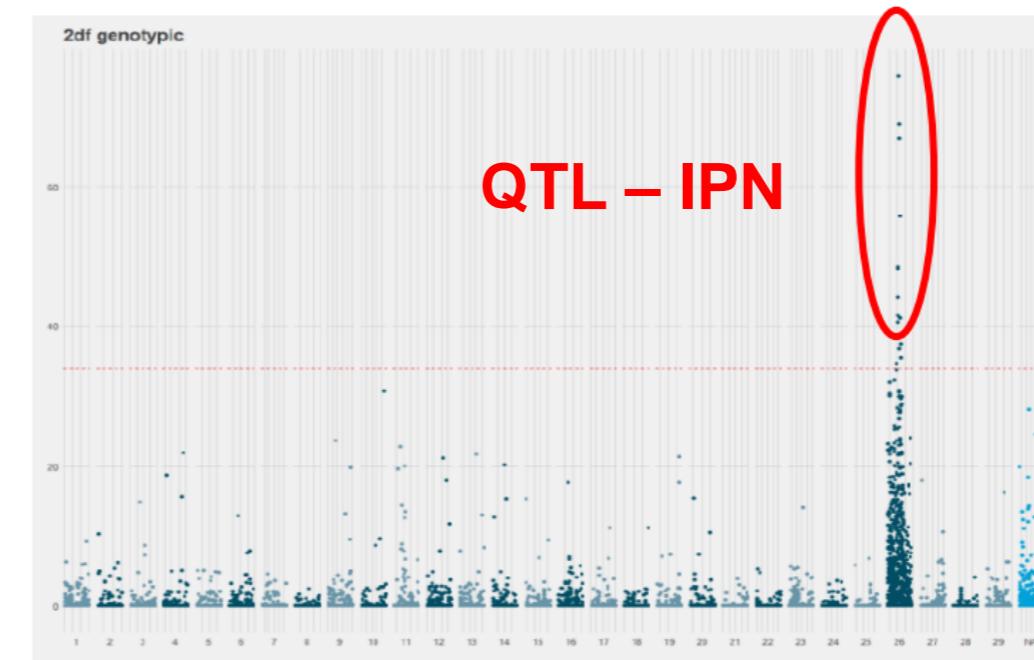
IDENTIFICATION OF SNPs ASSOCIATED WITH RESISTANCE

- Challenge tests at VESO (2018 – 2021)
- Increased resistance to:
 - IPN (infectious pancreatic necrosis)
 - PD (pancreas disease)
 - PMCV/CMS (piscine myocarditis virus / cardiomyopathy syndrome)
 - PRV/HSMI (piscine orthoreovirus / heart - and skeletal muscle inflammation)

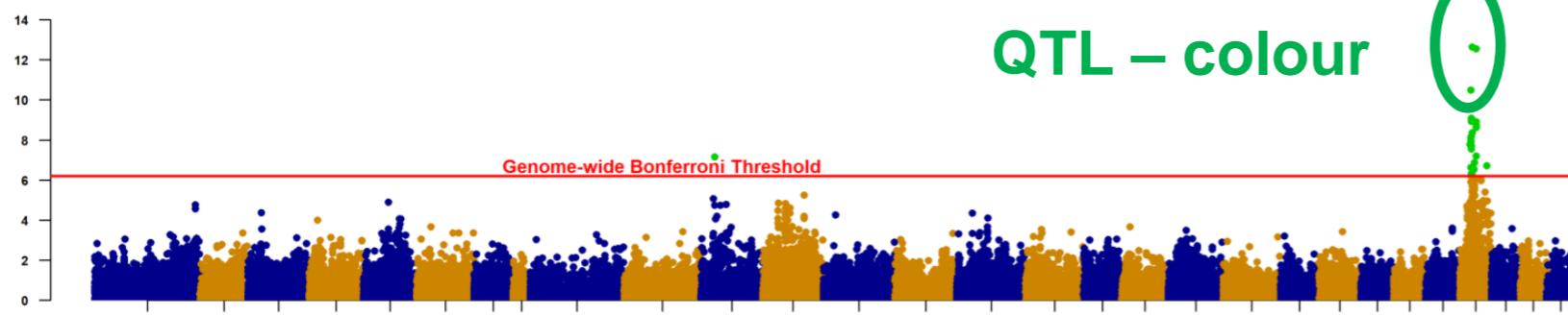
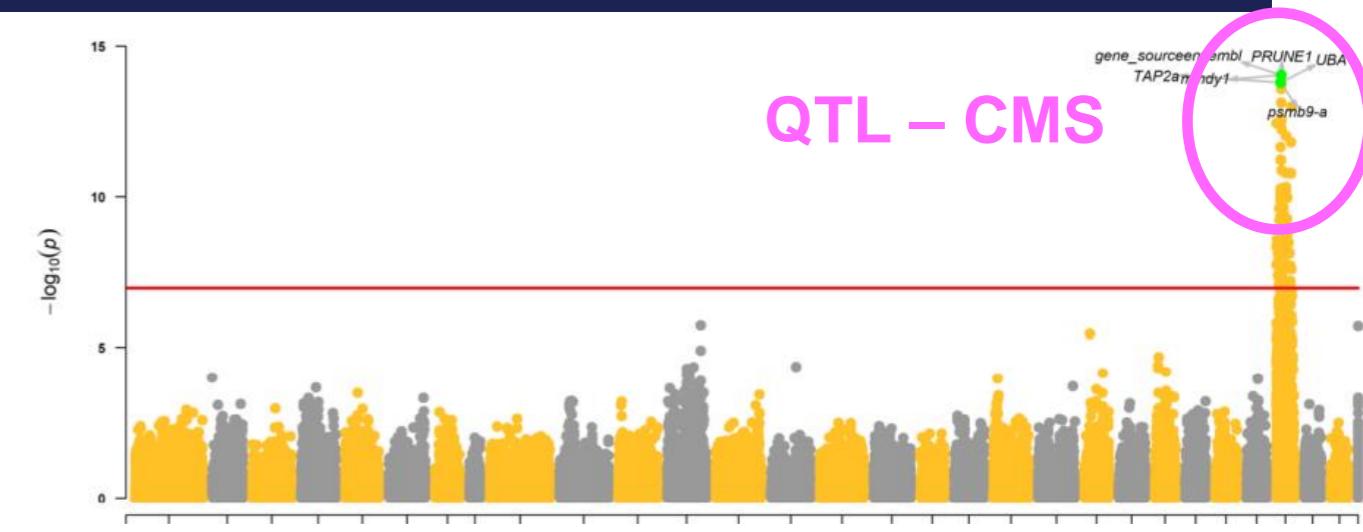
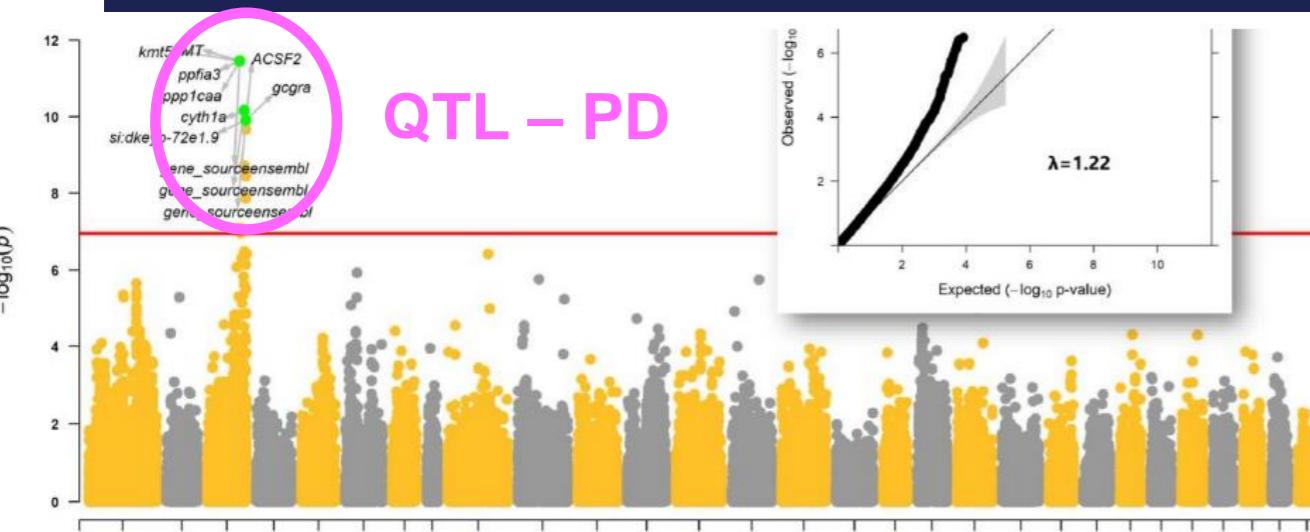


IDENTIFICATION OF SNPS ASSOCIATED WITH IPN RESISTANCE

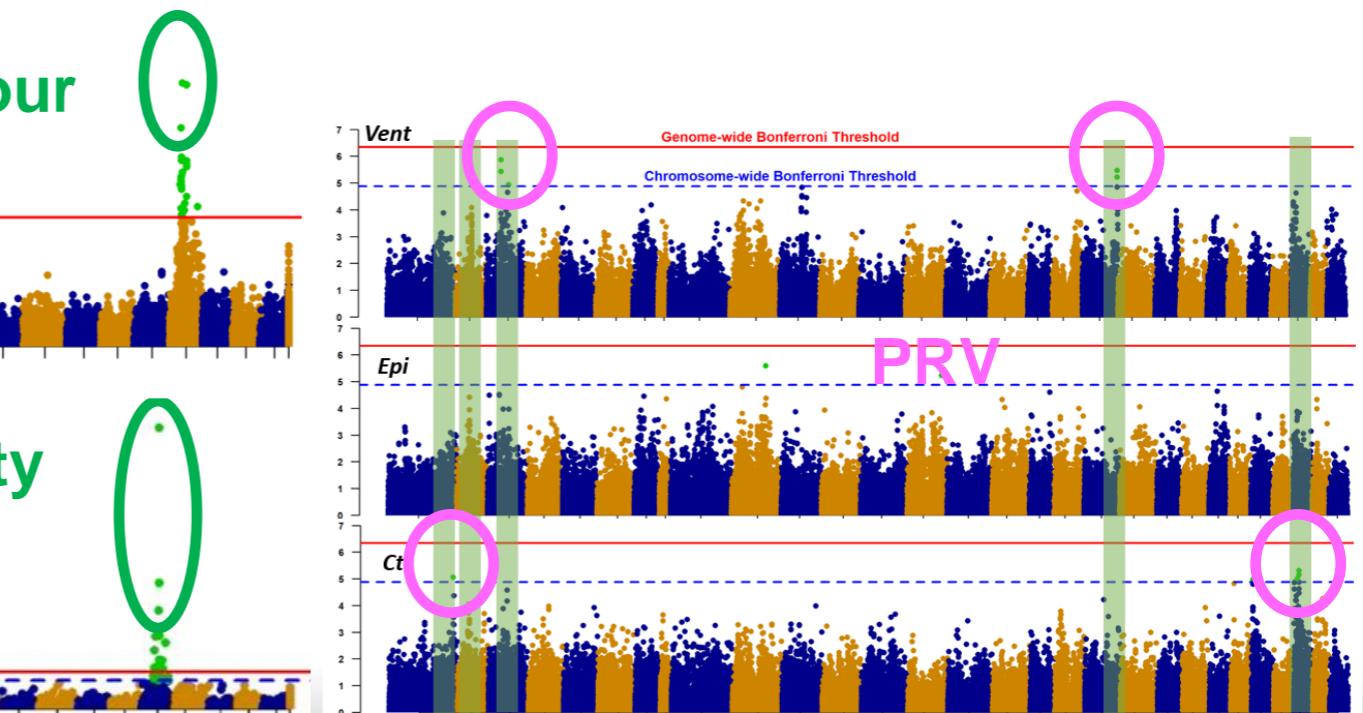
- Challenge test at VESO in autumn 2018
- DNA sampling
- 130K SNP Genotyping in 2019
- GWAS (genome-wide association study) in 2019
- Identification of QTL - IPN in 2020



SNPS ASSOCIATED WITH RESISTANCE, COL & Maturity



QTL – Sexual Maturity

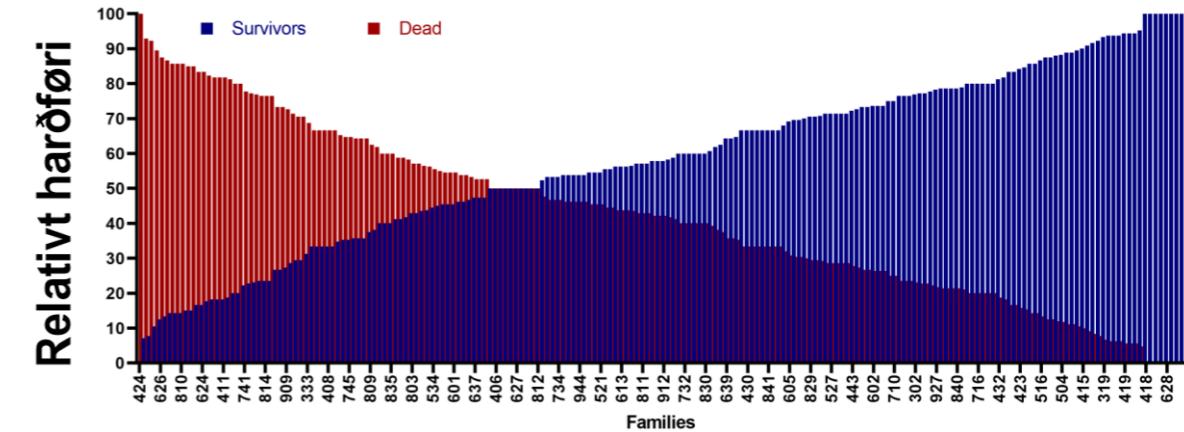


SNPS ASSOCIATED WITH LICE, ROBUSTNESS & WEIGHT

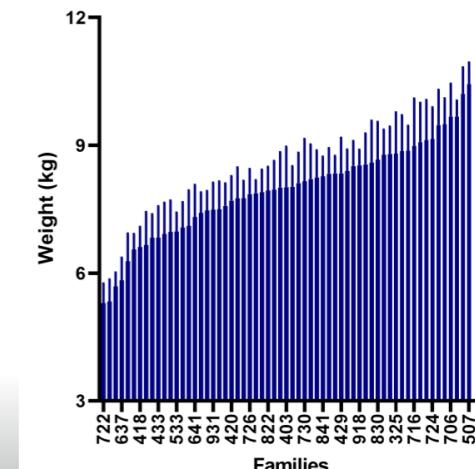
- Samanbera genotypirnar hjá **meira** og **minni** lúsamótstøðuforum fiski
- **Finna möguligar SNPar fyrir lúsamótstøðuföri**



- Samanbera genotypirnar hjá **meira** og **minni** harðfórum fiski
- **Finna möguligar SNPar fyrir harðföri**

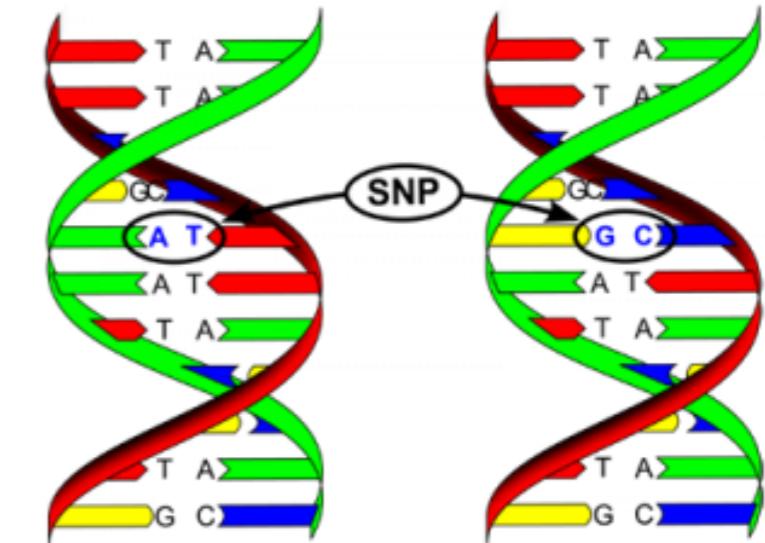


- Samanbera genotypirnar hjá **størri** og **minni** fiski
- **Finna möguligar SNPar fyrir vökstur**



THE 20K SNP PANEL USED FOR GENETIC SELECTION

- **20K SNP panel:**
 - QTL – IPN
 - QTL – PMCV/CMS
 - QTL – PD
 - QTL – Lit
 - QTL – ov tíðliga búning
 - PRV – móttstøðuførí
 - **GS – LÚS**
 - **Harðførí**
 - **GS – Vøkstur**



- **SNP** is a change in the single-nucleotide of a genome
- A **quantitative trait locus (QTL)** is a region of DNA associated with a specific phenotype or trait that varies within a population



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