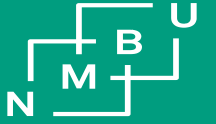




Comparison of GBLUP and Bayesp prediction methods in genomic optimum contribution selection

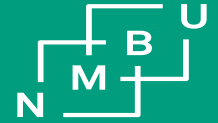
GebregiwerGIS, G.T., Sørensen, A.C., Henryon, M, Meuwissen, T.H.E.





Objective

To understand the effect of prediction methods (GBLUP vs Bayesian) on long- and short-term rate of genetic gain in genomic optimum contribution selection



Method

➤ GENOME

- 18 Chrs (167 cM each)
- QTLs
 - 7702
 - 1000
 - 180

➤ TRAIT

- Single trait
- $V_a = 1$
- $h^2 = 0.2$

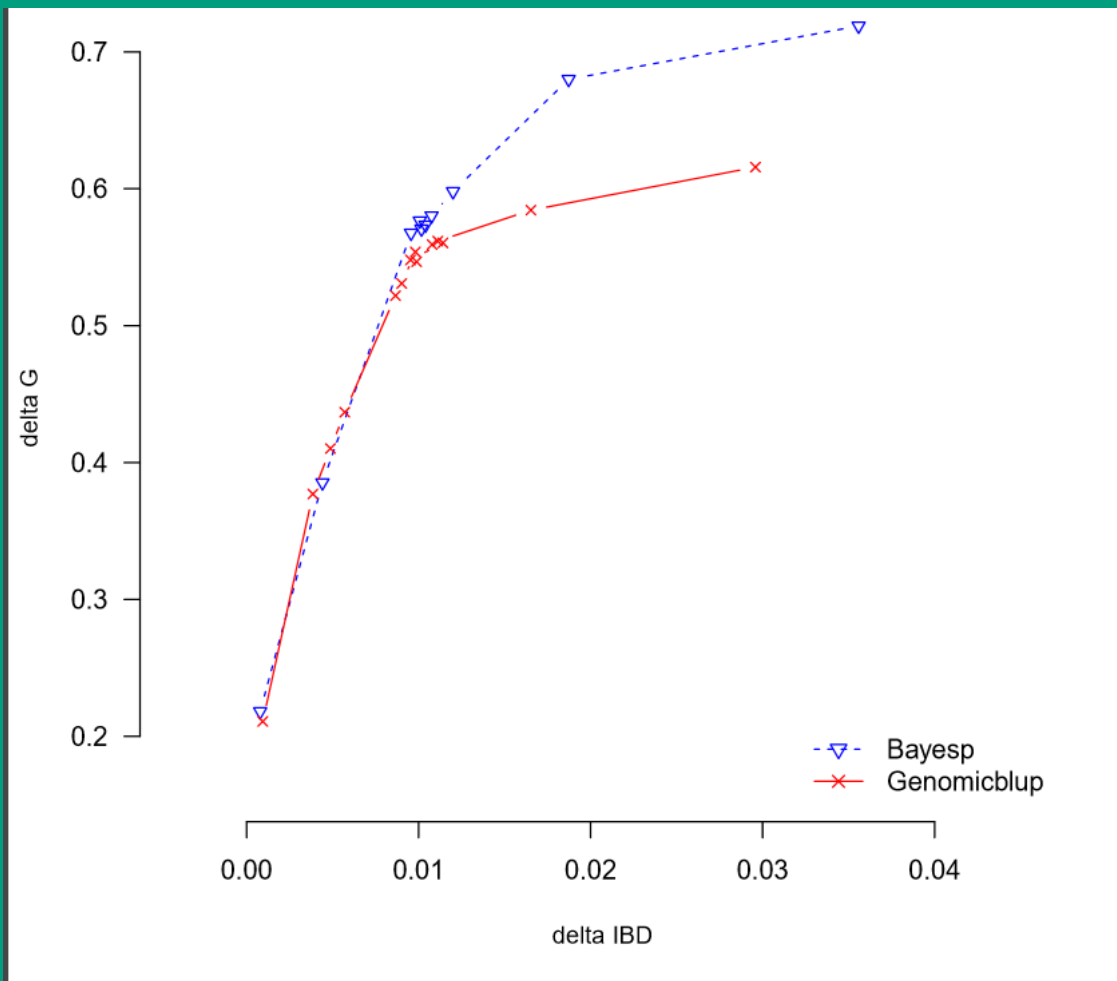
➤ Prediction methods

- GBLUP
- Bayesp

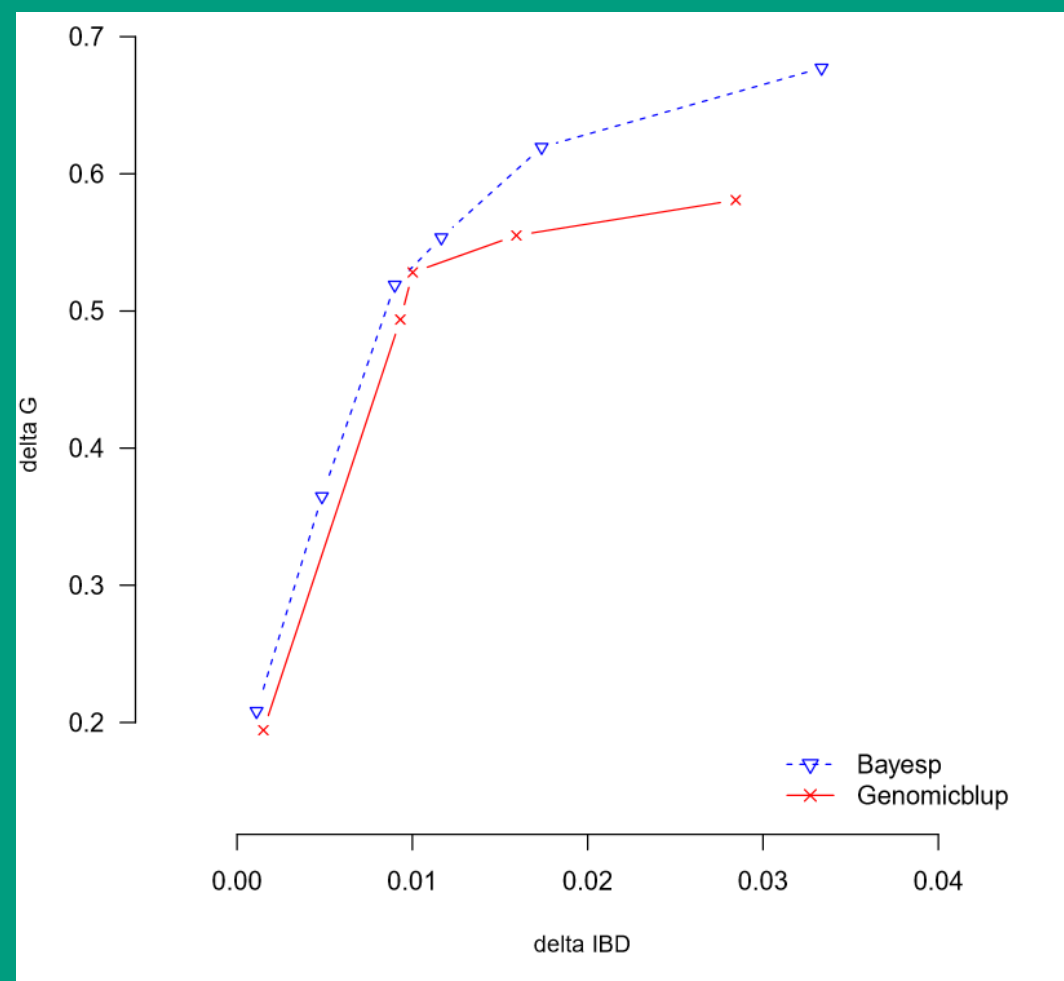


Results

QTLs=7702

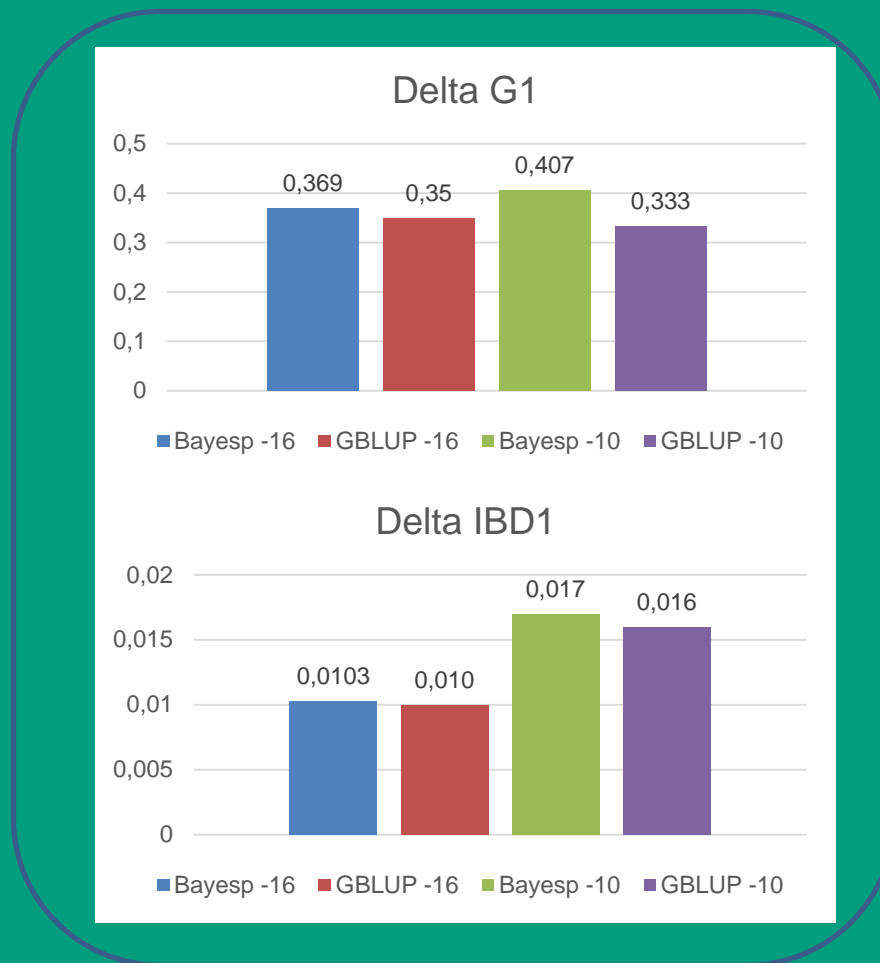


QTLs=1000



Rate of genetic gain vs rate of IBD

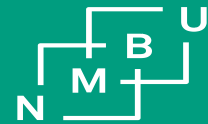
QTLs=180



Take home message



- At 1% and higher rate of IBD, Bayesp gives higher rate of genetic gain than GBLUP
- The difference in rate of genetic gain becomes larger as the rate of IBD increased

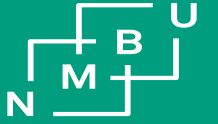


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Thank you
