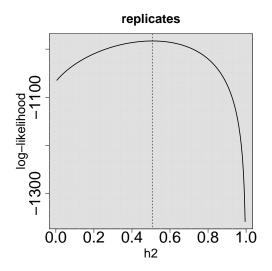
## Figure S4: Monotone likelihood



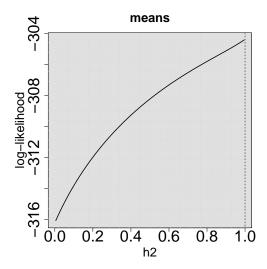


Figure S4: Log-likelihood as function of the heritability, for one of the 5000 simulated traits from Figure 1 (in the main text), for accessions drawn from the HapMap and a simulated heritability of 0.5 Here we choose one of the 882 traits (17.6%) for which the heritability estimate based on means  $(\hat{h}_m^2)$  was larger than 0.99. For these traits, the heritability estimate based on replicates  $(\hat{h}_r^2)$  was on average 0.502. For the trait shown here,  $\hat{h}_m^2 = 0.5087$  (left) and  $\hat{h}_m^2 = 0.9999$  (right).