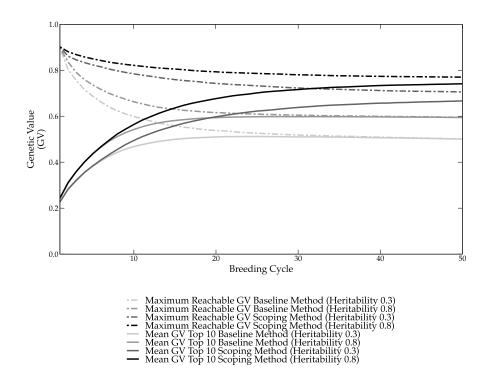


**Figure S1** The mean genetic value of the top 10 individuals using the *scoping* method and the *baseline* method simulated over 50 breeding cycles for 50 and 200 QTLs.



**Figure S2** The mean genetic value of the top 10 individuals using the *scoping* method and the *baseline* method simulated over 50 breeding cycles for a heritability of 0.3 and 0.8.