Supplemental material

A two-part strategy for using genomic selection to develop inbred lines

R. Chris Gaynor, Gregor Gorjanc, Alison R. Bentley, Eric S. Ober, Phil Howell, Robert Jackson, Ian J. Mackay, John M. Hickey

Contains 9 figures
Figure S1. Genetic gain for all breeding programs when GxY variance is 2 and 4. Genetic gain is expressed as mean genetic value of headrow entries over time. The mean genetic value for each replicate was centered on zero in year zero. Individual replicates are shown with faded lines and means for all ten replicates are shown with dark lines.

Figure S2. Late stage genetic gain for all breeding programs when GxY variance is 0 and 10. Genetic gain is expressed as mean genetic value of EYT entries over time. The mean genetic value for each replicate was centered on zero in year zero. Individual replicates are shown with faded lines and means for all ten replicates are shown with dark lines.
Figure S3. Late stage genetic gain for all breeding programs when GxY variance is 2 and 4. Genetic gain is expressed as mean genetic value of EYT entries over time. The mean genetic value for each replicate was centered on zero in year zero. Individual replicates are shown with faded lines and means for all ten replicates are shown with dark lines.

Figure S5. Genetic variance for all breeding programs when GxY variance is 2 and 4. Genetic variance is expressed as the genetic variance among headrows in each year of the simulation. Each line represents the overall mean for all 10 replicates.
Figure S6. Late stage genetic variance for all breeding programs when GxY variance is 0 and 10. Genetic variance is expressed as the genetic variance among EYT entries in each year of the simulation. Each line represents the overall mean for all 10 replicates.

Figure S7. Late stage genetic variance for all breeding programs when GxY variance is 2 and 4. Genetic variance is expressed as the genetic variance among EYT entries in each year of the simulation. Each line represents the overall mean for all 10 replicates.

Figure S8. Genomic prediction accuracy for all breeding programs when GxY variance is 2 and 4. Genomic prediction accuracy is expressed as the correlation between true and genomic predicted genetic values of headrow entries over time.
Figure S9. Genomic prediction accuracy in the population improvement part of the two-part programs when GxY variance is 2 and 4. Genomic prediction accuracy is expressed as the correlation between true and genomic predicted genetic values of all population improvement plants over time.