

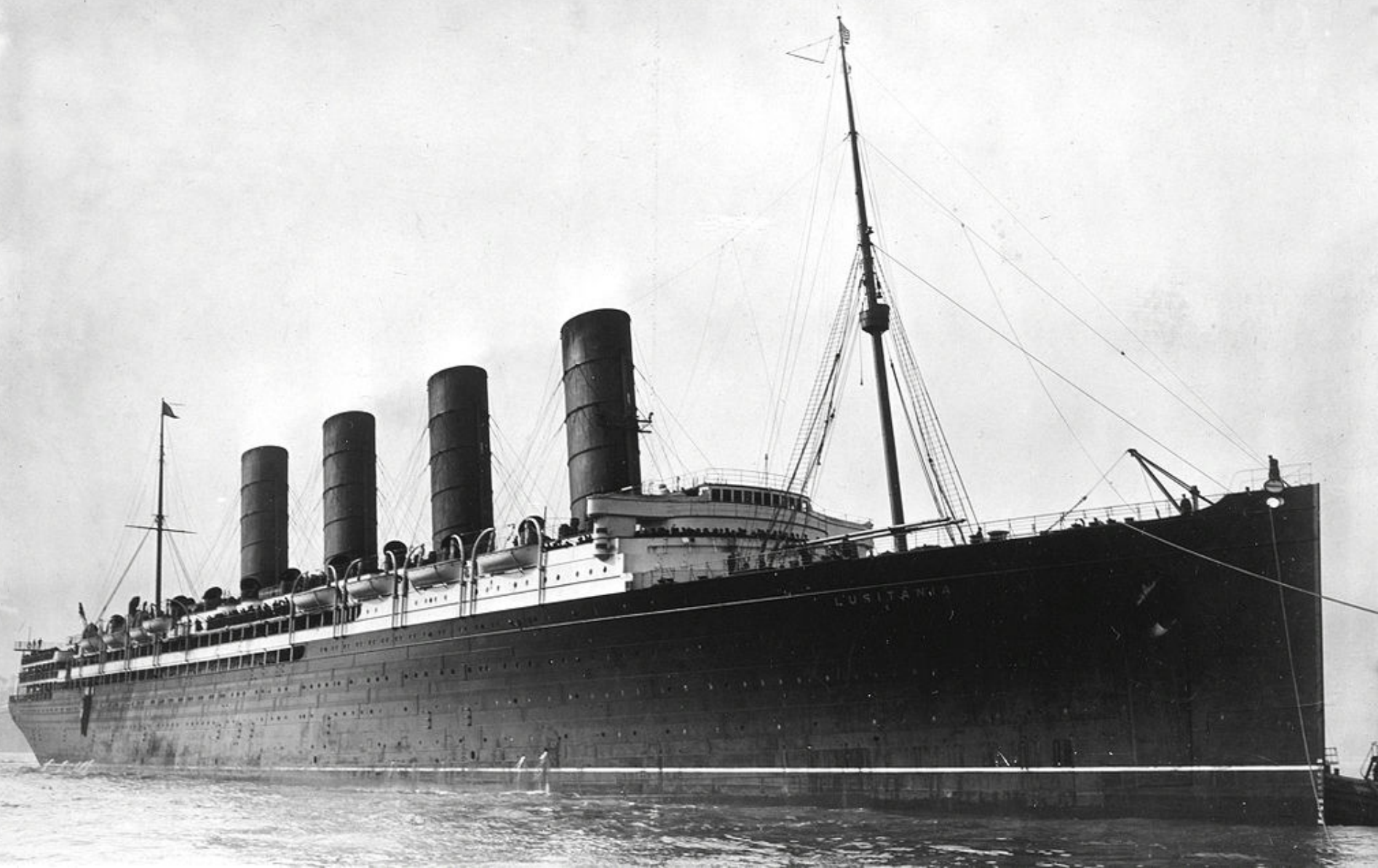
A photograph of a field of tall, golden-brown grass, likely a cover crop or a type of grain. In the background, there is a line of green trees and a tall, grey silo. The sky is overcast and grey.

Kernza® Breeding and Genomics

Lee DeHaan
The Land Institute



1903, 120 feet, 12 seconds



1906, 2198 passengers



2007, 853 Passengers



Intermediate Wheatgrass improvement

— Non-shattering



Shattering

Selected









- Initial assembly by NRGene
- Population Sequencing
- RNA Sequencing for annual/perennial comparison
- RNA Sequencing for phylogeny

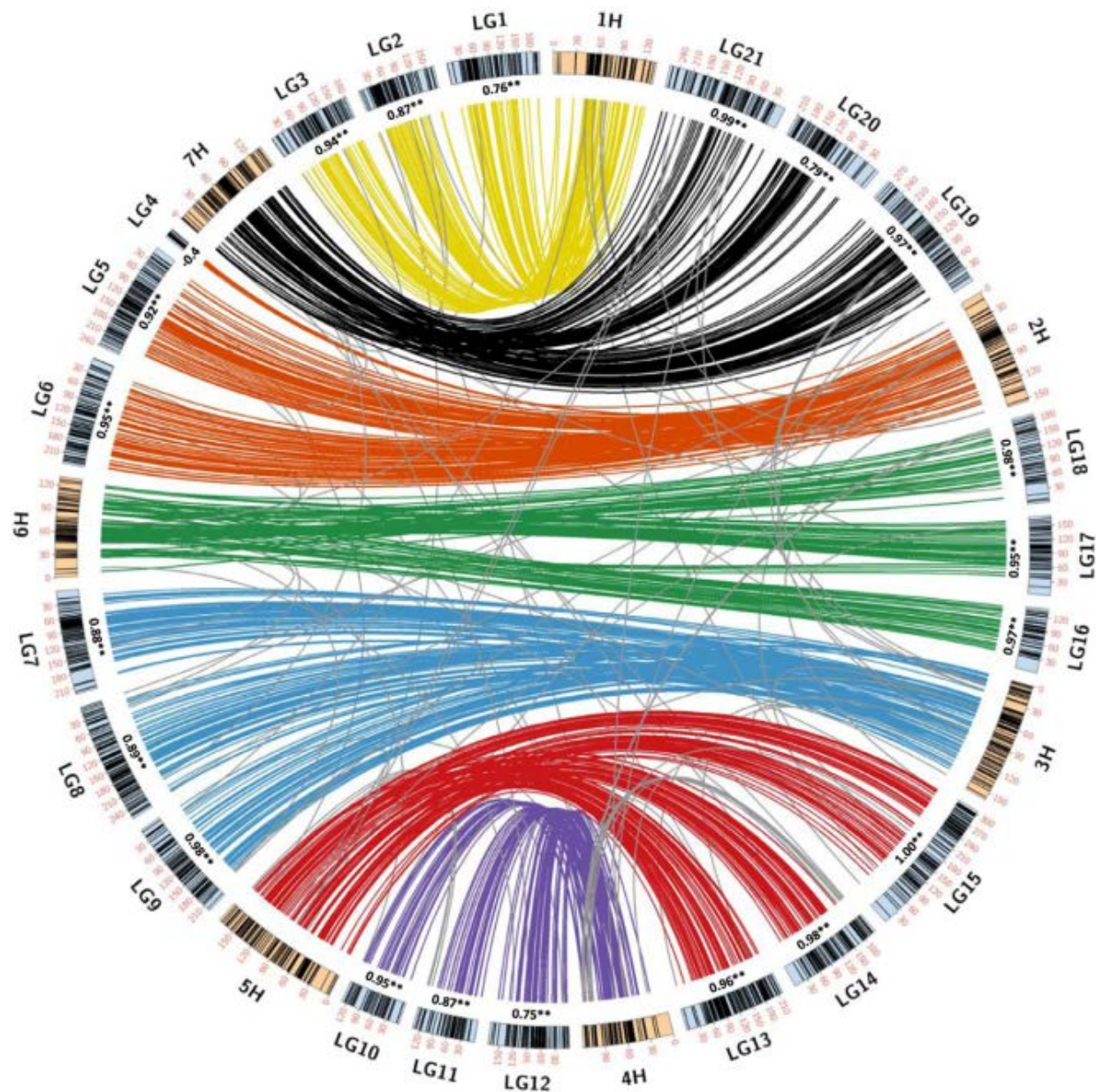
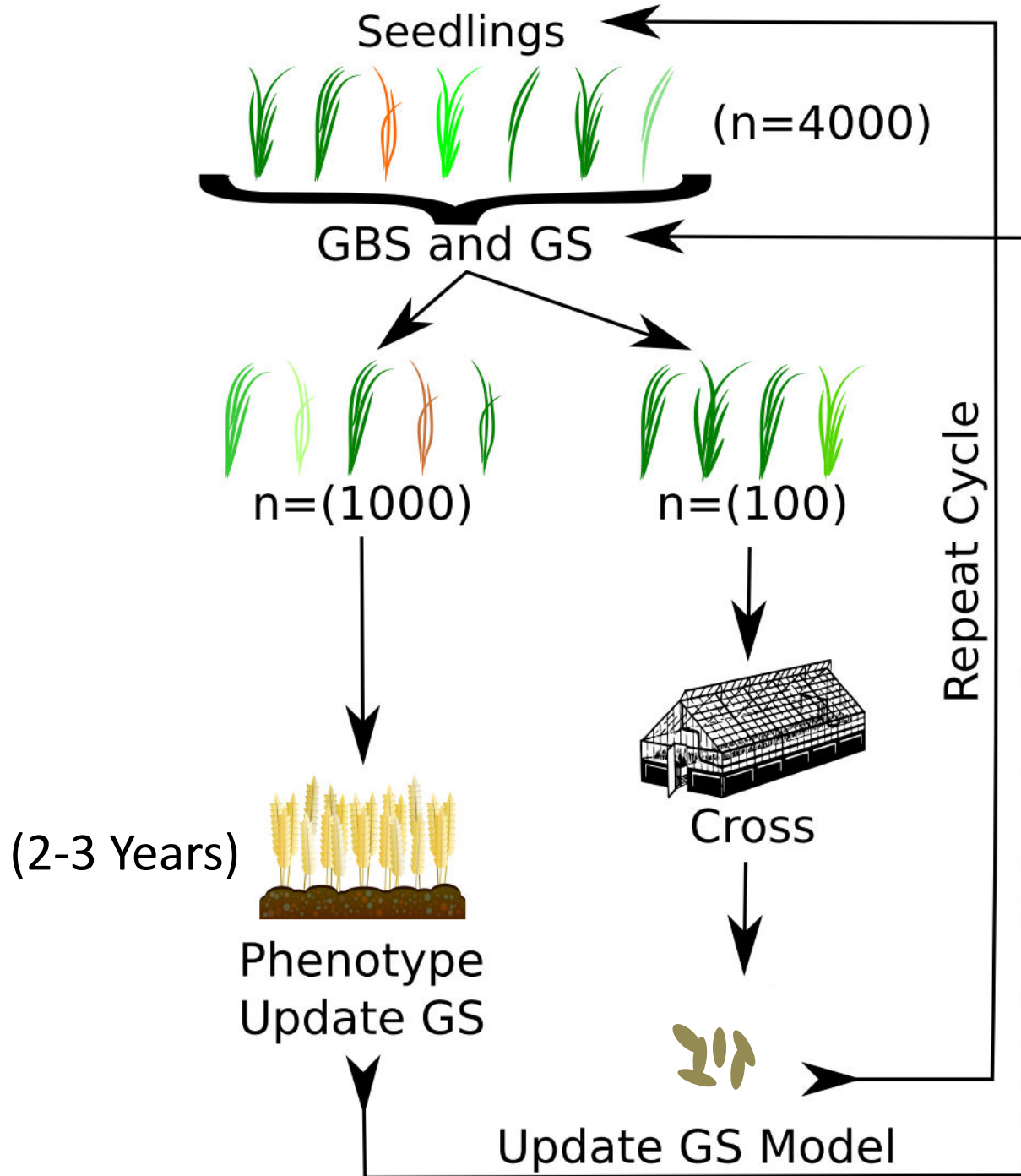


Figure 5. The collinearity of linkage groups of intermediate wheatgrass with barley chromosomes. The linkage groups were designated as LG1 to LG21, with LG1–3 corresponding to 1H, LG4–6 to 2H, and so on. The Spearman rank correlation coefficients (ρ) were calculated using R package 'pspearman'. ** Indicates significance at $p < 0.01$.

Genomic Selection





More at: www.landinstitute.org