

Genomic Sequence Diversity and Population Structure of Saccharomyces cerevisiae Assessed by RAD-seq

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Population Structure of Saccharomyces cerevisiae

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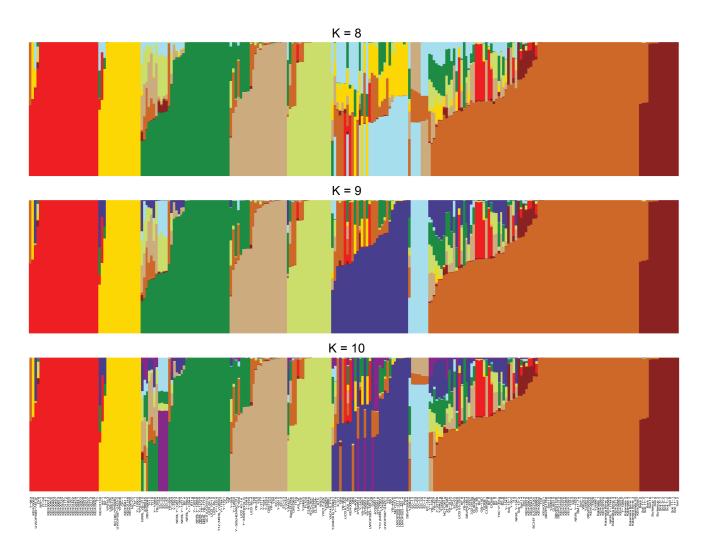


Figure S1 Population ancestry of strains inferred by InStruct. Populations are color-coded and the proportion of population ancestry assigned to each strain is indicated by bar height. Strain ancestry is shown assuming 8, 9 and 10 populations (K), with the order of strains based on K = 9 and color-coding of major populations matching that of K = 9.

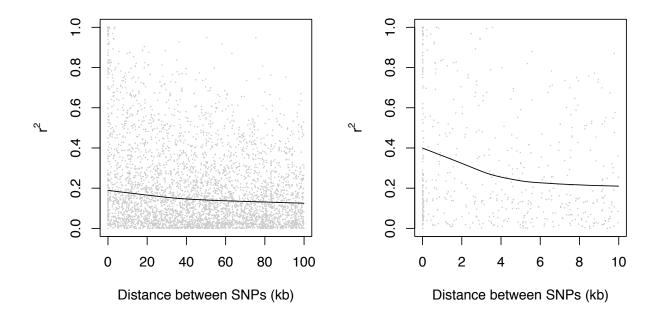


Figure S2 Linkage disequilibrium as a function of physical distance. Points show the square of the correlation coefficient (r2) between each pair of 759 common SNPs as a function of distance for sites within 100 kb of one another (A) and for sites within 10 kb of one another (B).

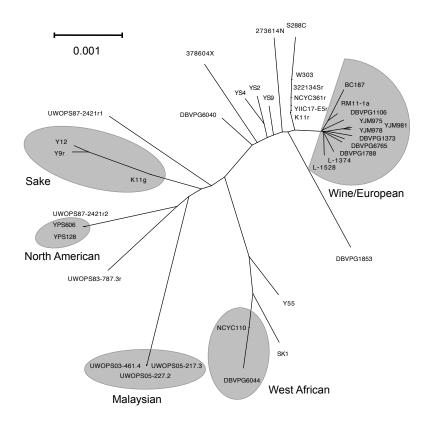


Figure S3 RAD-seq neighbor-joining tree of the 38 *S. cerevisiae* strains used in both this study and a previous population analysis that used whole genome sequencing (compare to LITI *et al.* 2009 Figure 1C). Branch lengths are proportional to sequence divergence measured as P-distance. Scale bar indicates 10 polymorphisms/ 10 kb of sequence. The 2 divergent positions for strain K11 are likely caused by mislabeling of the strain used for the "K11r" sequencing. Strains comprising the 5 lineages identified in LITI *et al.* 2009 have been labeled (North America, Sake, Malaysian, West African, Wine/European).

Supporting Data and Tables

Available for download at http://www.g3journal.org/lookup/suppl/doi:10.1534/g3.113.007492/-/DC1

- **File S1** Matrix of polymorphic sites. The matrix consists of 5,868 bi-allelic sites (columns) and 262 strains (rows) with column labels indicating the chromosome number and position separated by a period. Genotypes are represented by 0 or 2 for homozygotes, 1 for heterozygotes and -9 for missing data. Entries are comma delimited.
- **File S2** Neighbor-joining tree of 262 *S. cerevisiae* strains based on multiple alignment of 116,880 bases. This tree is a version of Figure 1 that includes strain labels and the maximum group membership from Figure 2 and is in Newick format to allow visualization with phylogenetic tree viewing software.
- Table S1
 Strains used in this study, with population assignments inferred by InStruct.
- Table S2
 Populations inferred using InStruct and summary statistics.
- **Table S3** Fit of the population structure model as a function of the number of populations.