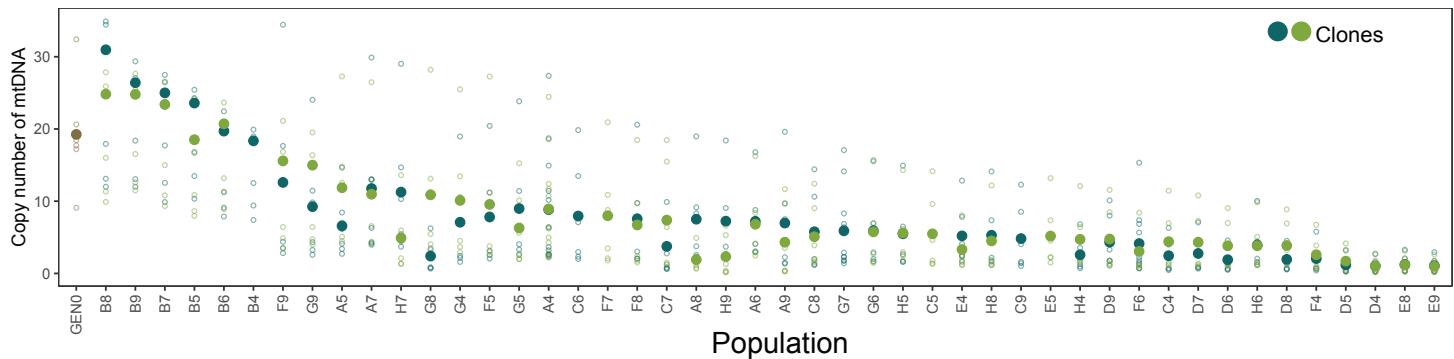
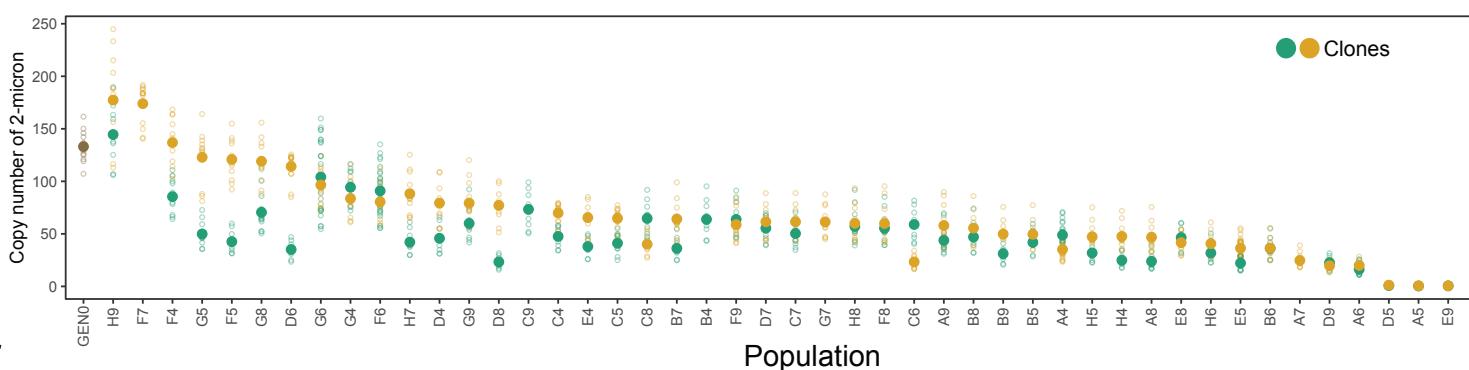


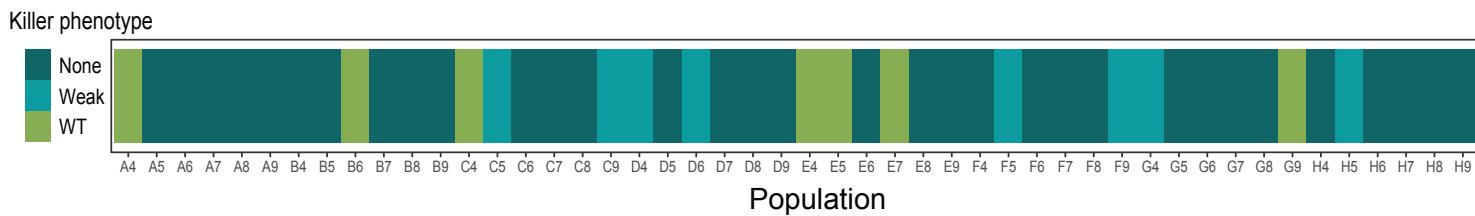
A



B



C



**Supplementary Figure 6. Recurrent loss of extrachromosomal elements and killing ability in galactose-evolved populations after 4,000 generations.** Estimated copy number of (A) mitochondrial DNA and (B) 2-micron plasmid per every copy of the nuclear genome per clone. Each population is represented by the two sequenced clones labeled with different colors. Open circles indicate copy number estimation every 1000 bp window size and 500 nt step size. Solid circles indicate the mean copy number. (C) Reduction of killing ability in yeast that harbor killer viruses. The killing ability was determined by Halo assay (WT=large clearing, weak=small clearing, and none=no clearing). There is no correlation between fitness and 2 micron copy number (Pearson  $r = -0.13$ ,  $p$ -value = 0.212). For mitochondria, there is a moderate positive correlation (Pearson  $r = 0.40$ ,  $p$ -value =  $6.26 \times 10^{-5}$ ).