

First-of-its-kind genetic map created for wheat

An international team of scientists led by Eduard Akhunov, Ph.D., of [Kansas State University](#) has created the first haplotype map of wheat that provides detailed description of genetic differences in a worldwide sample of wheat lines.

Plant scientists often look at the genetic makeup of an organism to breed new varieties for specific, desirable traits, such as drought, pest or disease resistance.

The haplotype map gives them quick access to rich, genetic variation data that increases the precision of mapping genes in a plant genome, and improves scientists' ability to select the best lines in breeding trials.

In their study, Akhunov and his colleagues analyzed 62 wheat lines from around the world that were either modern cultivars or varieties not previously improved through formal breeding techniques.

“Once genes controlling agronomic traits are identified, they can be used for improving wheat using not only traditional breeding approaches, but also new strategies that are based on biotechnology and molecular biology,” said Dr Akhunov, who is the senior author of the paper published in the journal *Genome Biology*.

Read full, original article: Scientists create haplotype map of wheat varieties