Genetic analysis of sorghum predicts best varieties for drought, stress

Differences in a crop plant's genes can help predict how a particular variety will respond to a drier or hotter climate.

Geneticist Geoff Morris of Kansas State University sampled the genomes of about 2,000 varieties of sorghum, looking for differences.

Using different genetic signatures and the location data, Morris and his colleagues were able to determine how each variety adapted to environmental stressors, such as drought and toxins in the soil.

They grew test plots of hundreds of varieties in India and Texas, and subjected them to drought conditions. The result showed that the genetic analysis predicted which ones were likely to do well under stress.

The findings, collected in a database, will help sorghum breeders in developing countries make better choices about which varieties to plant based on the weather that's forecast for an upcoming growing season.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: Genetic Signatures Identify Crop Varieties Best Able to Withstand Stress