

Genetic breeding speeds improvement of African, Asian staple cowpea crop

UC leads six Feed the Future Innovation Labs ... The labs work to develop climate-resilient crops such as chickpea, cowpea and millet, and also look to improve poultry, produce and increase food access.

Abundant in protein and energy-rich oils, cowpeas — also known as black-eyed peas — are central to the diets of millions of people across Africa and Asia. But according to UC Riverside's Timothy Close and Philip Roberts, the legume crop is performing at only 20 percent of its genetic potential. So they've set out to breed new cowpea varieties that have both higher yield and quality, along with disease resistance, pest resistance and drought tolerance.

To accomplish this, they're using a genetic tool called DNA marker-assisted breeding — in essence, a process that uses genetic analysis to find and select for specific desired traits, vastly speeding up the traditional hybridization process.

"We are no longer confined to slower, less directed methods of plant breeding, nor must we base all hope on genetically modified organisms," Close said...

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [How scientists are taking on the global food crisis](#)