

Over 2,000 Nigerian farmers ready to grow GM cowpea this year

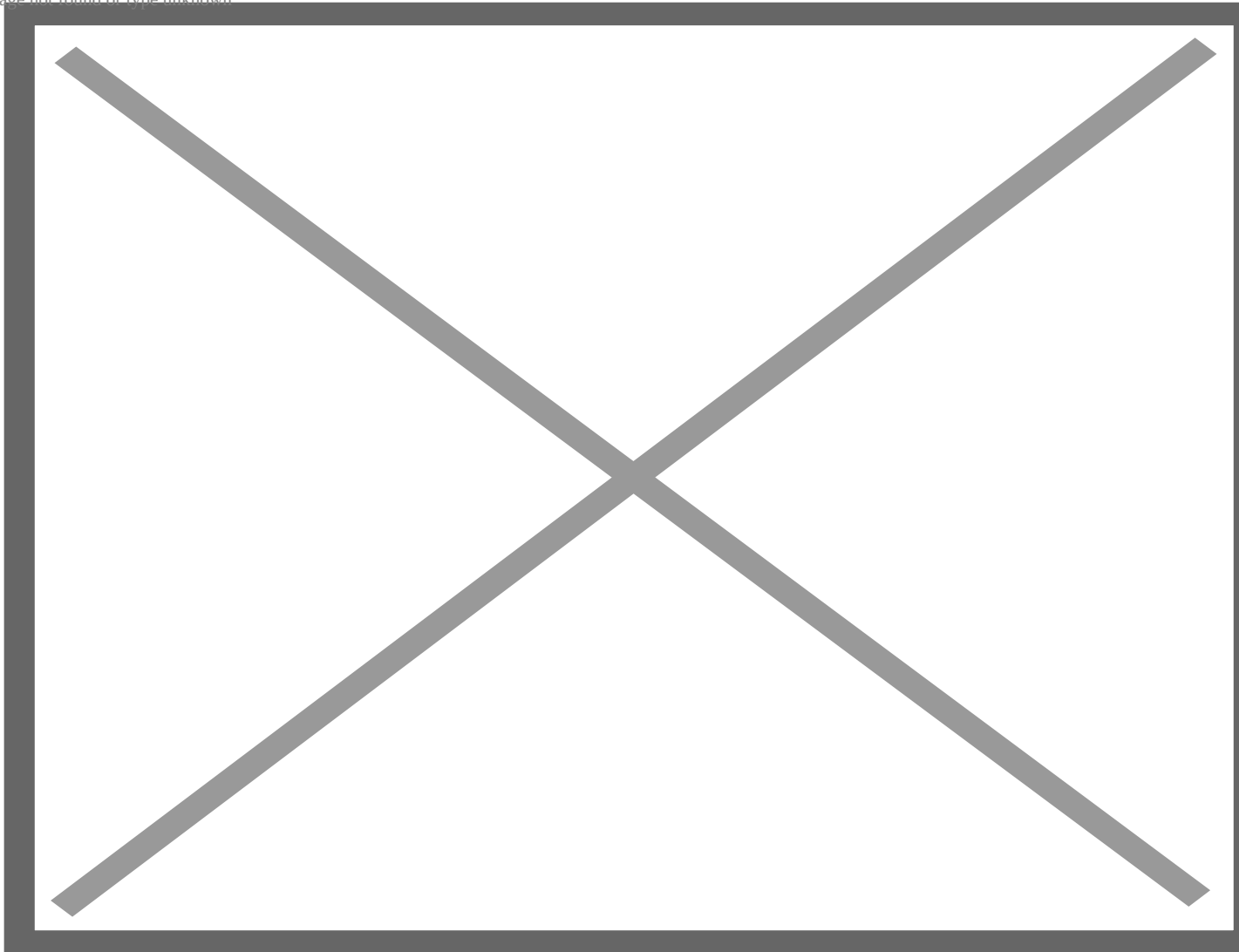


More than 2,000 Nigerian farmers are planning to plant Bt cowpea, the country's first genetically modified food crop, in July.

The crop, which was developed by Nigerian scientists, has been genetically modified (GM) to resist the destructive pod-borer insect pest. As a result, farmers will be able to significantly [reduce pesticide applications and harvest bigger yields](#). The crop is also expected to support the nation's economic development and food security while improving farmers' livelihoods.

Farmers representing the 36 states of the federation, including the Federal Capital Territory (FCT), are expected to participate in the massive countrywide planting of the crop in the 2021 planting season, which begins in July, said Mohammed Umar, trial manager of the pod borer resistant (PBR) cowpea project in Nigeria.

Image not found or type unknown



Bt cowpea. Credit: VON

The Nigerian government [approved the commercialization](#) of Bt cowpea in 2019 but plans to begin farming the new crop were derailed last year by the COVID-19 pandemic.

Umar said plant breeders used that time to popularize the crop among farmers for the 2021 farming season.

“We did the demonstration concurrently for almost two years,” he said. “We started in 2018 when we wanted to get data through the ‘seeing is believing’ [approach] so we gave [seed] to farmers to test it themselves, comparing the conventional cowpea with the SAMPEA 20T. So, it was more like a study for preference ranking.

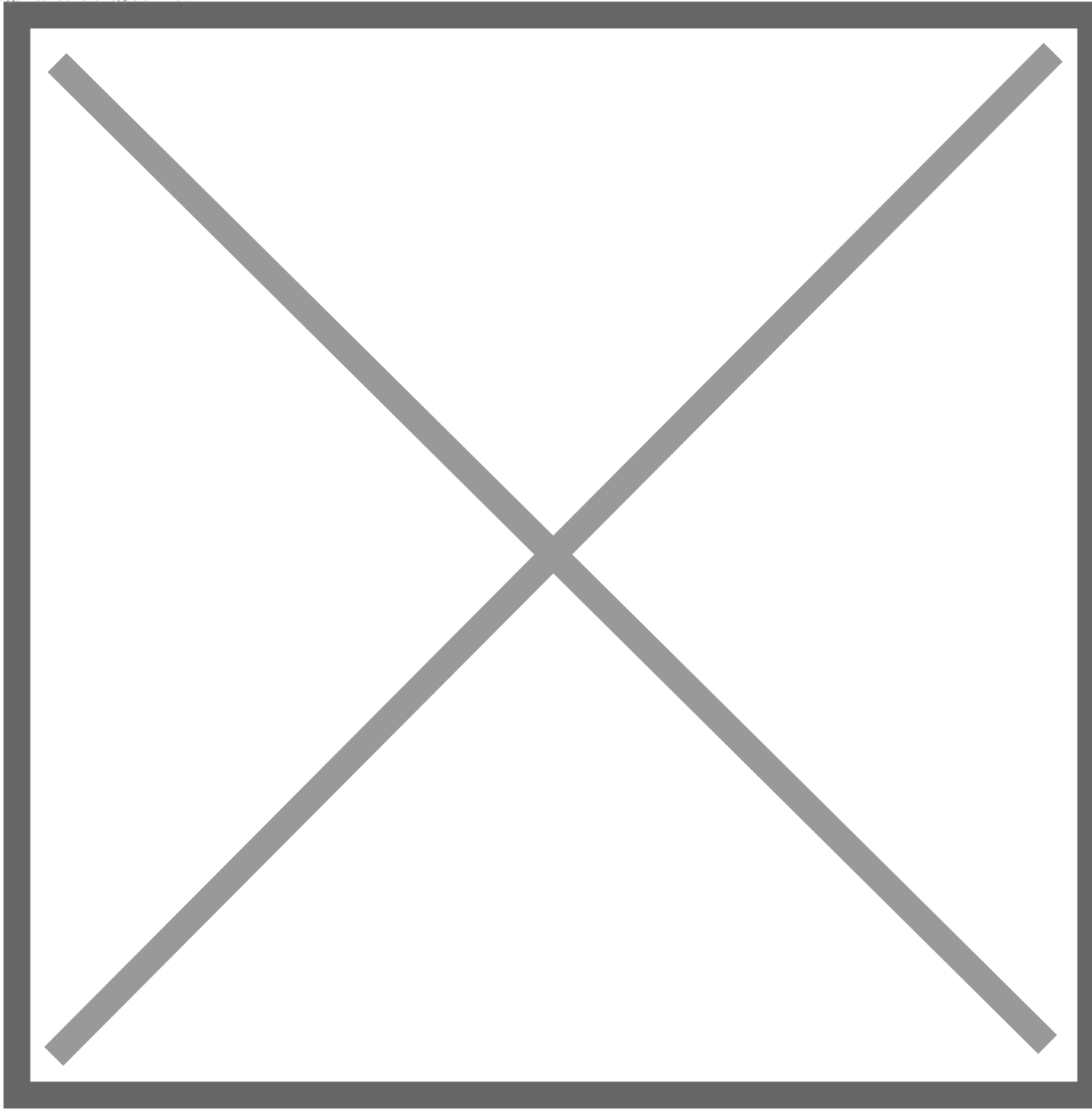
“In the 2021 season and because of the need, we want to popularize it for more farmers,” he continued.

“We are planning to have mass demonstration [projects] across the whole 36 states, including FCT, Abuja. Initially, we proposed 36 farmers per state, but at that time it was only 24 states. Now we are extending it to even the south and south east because they are also requesting for it.”

Three seed companies — Maina Seeds, Tecni Seeds and SARO Agrosiences — have been accredited to oversee the multiplication and production of quality GM cowpea seeds for farmers, Umar said.

Dr. Onyekachi Nwankwo, chairman of the inter-disciplinary, inter-agency National Stewardship Committee on SAMPEA 20T PBR Cowpea, said the panel is charged with the mandate of responsible and ethical management of the product. It includes representatives from the Institute of Agricultural Research (IAR) in Zaria; National Agricultural Extension and Research Liaison Services (NAERLS); National Biotechnology Development Agency (NABDA); National Agricultural Seed Council (NASC), Maina Seeds; Tecni Seeds; Saro Agrosiences; IAR Seeds, and African Agricultural Technology Foundation (AATF).

Image not found or type unknown



Dr. Onyekachi Nwankwo. Credit: AATF

“Part of what we do is to make sure there is sustainability of the product along the value chain,” he explained. “Which means that for every agricultural product there is always the need to manage this

product in a way that will enhance the sustainability and make sure it is of benefit to the farmers who are the target. So, that's why today we have constituted a national stewardship committee. Stewardship simply means responsible and ethical management of a product, and in our stewardship, we take the product life cycle approach.

"We start from the product development and then we continue with the stewardship to product commercialization up till product discontinuation because science is evolving and the researchers who developed this are still on the drawing board trying to develop more products. So, if other products come out that are better than this, we will discontinue this and continue with those ones addressing different issues."

As part of that stewardship effort, farmers must be trained in proper field management and cultivation practices to ensure the resistance trait remains effective. It's also important to prepare farmers, the market and the Nigerian public for this new crop.

Committee member Emmanuel Ikani, executive director of NAERLS, stressed that people must be given correct information if the nation is to get things right with its first GM food crop.

Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other 'disruptive' innovations. Subscribe to our newsletter.

[SIGN UP](#)

"The right information in the agricultural space is our job," he said. "How to get it and disseminate it to the field actors is our job. So, this new cowpea cannot sell until it is sold. So, our job is to get it sold to the farmers and we're getting to the human phase of the project where it can be commercialized for massive production. And this phase is no longer in the lab, it is now by human beings, which are not tools. To get a human being to embrace a new technology there must be an attitudinal change and that is the job we are equipped to do."

The agency's mandate includes getting agricultural technology out to the farmers and teaching them how to handle it well. Ikani said that for the past year, the agency has been using virtual channels to train the country's agricultural extension directors in good agricultural practices for Bt cowpea. Those directors then disseminate it to the farmers.

Additionally, NAERLS has produced training bulletins for extension workers and guidebooks for farmers, as well as fact sheets and flyers.

"We have gone as far as making souvenirs like t-shirts to promote this new product to farmers," he added.

The market is also being prepared so that it's ready when GM cowpea are harvested, he said, noting that a good product stands out and sells itself.

Nkechi Isaac is a deputy editor with Leadership Newspaper, a national publication headquartered in Abuja, Nigeria. She frequently covers biotechnology and biosafety issues. Follow her on Twitter [@enkaybc](#)

A version of this article was originally posted at the [Cornell Alliance for Science](#) and has been reposted here with permission. The Cornell Alliance for Science can be found on Twitter [@ScienceAlly](#)