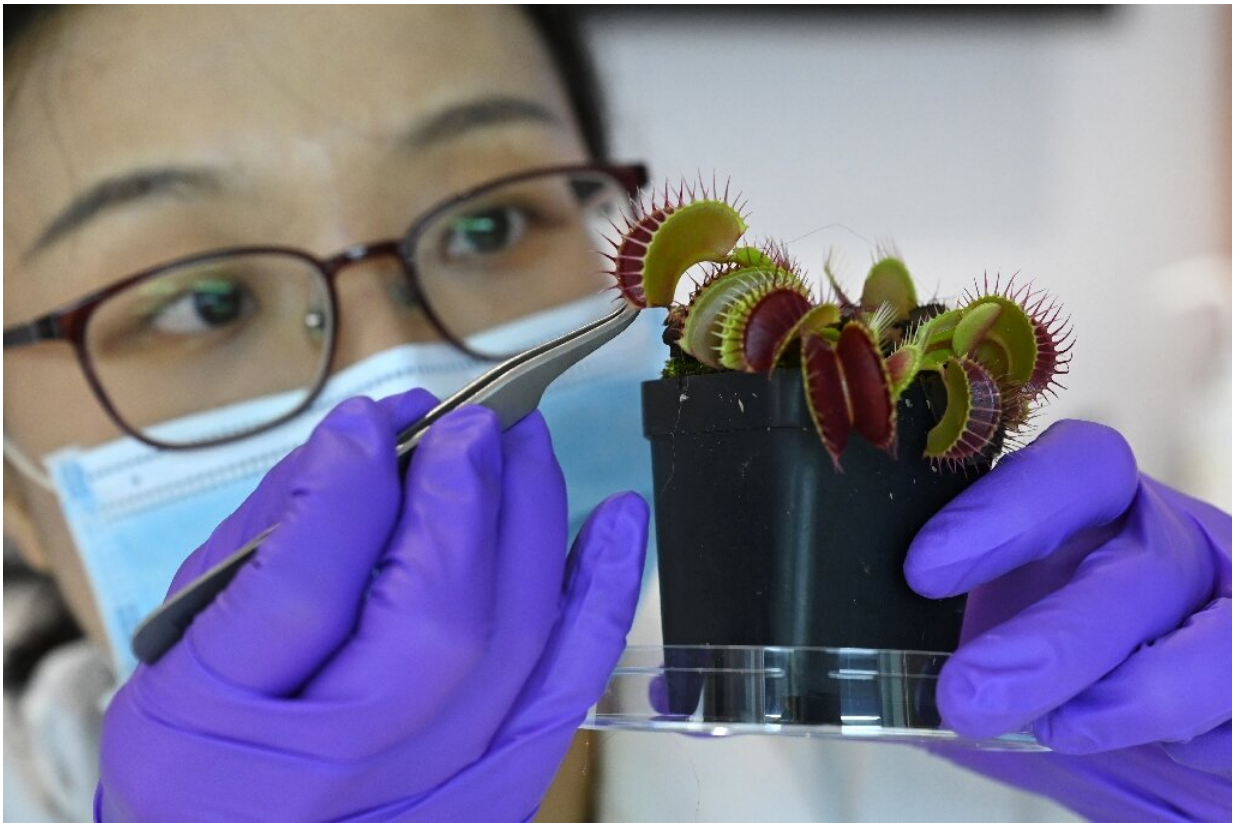


Rise of the 'robo-plants', as scientists fuse nature with tech

April 6 2021, by Catherine Lai



Researchers in Singapore linked up plants to electrodes, using the technology to trigger a Venus flytrap to snap its jaws shut at the push of a button on a smartphone app

Remote-controlled Venus flytrap "robo-plants" and crops that tell

farmers when they are hit by disease could become reality after scientists developed a high-tech system for communicating with vegetation.

Researchers in Singapore linked up plants to electrodes capable of monitoring the weak electrical pulses naturally emitted by the greenery.

The scientists used the technology to trigger a Venus flytrap to snap its jaws shut at the push of a button on a [smartphone app](#).

They then attached one of its jaws to a [robotic arm](#) and got the contraption to pick up a piece of wire half a millimetre thick, and catch a small falling object.

The technology is in its early stages, but researchers believe it could eventually be used to build advanced "plant-based robots" that can pick up a host of fragile objects which are too delicate for rigid, robotic arms.

"These kinds of nature robots can be interfaced with other artificial robots (to make) hybrid systems," Chen Xiaodong, the lead author of a study on the research at Nanyang Technological University (NTU), told AFP.

There are still challenges to be overcome. Scientists can stimulate the flytrap's jaws to slam shut but can't yet reopen them—a process that takes 10 or more hours to happen naturally.

Citation: Rise of the 'robo-plants', as scientists fuse nature with tech (2021, April 6) retrieved 6 May 2024 from <https://phys.org/news/2021-04-robo-plants-scientists-fuse-nature-tech.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.