

Japan robot can pick strawberry fields forever for farmer

September 25 2013



Agricultural machinery maker Shibuya Seiki and National Agriculture and Food Research Organisation display a robot picking a ripe strawberry, Tokyo, September 25, 2013.

A robot that picks ripe strawberries as the farmer sleeps was unveiled in Japan on Wednesday, with its developer saying it could cut workloads by

two-thirds.

The device, which can gather a piece of fruit every eight seconds, uses three cameras to determine which strawberries are ready to pick before darting out an arm and snipping them into its basket.

The two-metre (6ft 6ins) robot moves on rails between rows of strawberries, which are usually grown in elevated planters in [greenhouses](#) in Japan.

It "calculates the degree of ripeness from the colour of the strawberry, which it observes with two digital cameras", said Mitsutaka Kurita, an official of Shibuya Seiki which developed the machine.

"It also uses the images from the two cameras to calculate the distance from the target, then approaches the strawberry it is aiming at," he said.

A third camera then takes a detailed picture of the fruit, which it uses for the final calculation before moving in for the snip.

Strawberry farming is highly labour-intensive, requiring 70 times the input that growing rice requires and twice that of [tomatoes](#) and [cucumbers](#), said a statement from co-developer the National Agriculture and Food Research Organisation.

"This robot would harvest two-thirds of strawberries during the night when growers are sleeping," Kurita said.

"The farmer can then pick the rest of the strawberries that the robot couldn't get at," he said.

The robot will be on sale early next year for about five million yen (\$50,000).

Strawberries are available all year round in Japan, where they usually cost at least 500 yen for a small punnet.

© 2013 AFP

Citation: Japan robot can pick strawberry fields forever for farmer (2013, September 25)
retrieved 28 April 2024 from

<https://phys.org/news/2013-09-japan-robot-strawberry-fields-farmer.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.