Robots with poison guns target weeds and offer an alternative to some herbicides

The plants we eat have bitter enemies on all sides.

Can robots with poison guns help them?

“Aggressive weeds, insects, and fungi are just some of the obstacles,” says Ingeborg Klingén. She is head of research at the Norwegian Institute of Bioeconomy Research (NIBIO).

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Precision is key when applying poison, a skill that the AX-1 robot is being trained in.

“We have taught the robot AX-1 to compare weeds with pictures of weeds,” says Brevik.

It can do this with artificial intelligence.

[AX-1 company Kilter general manager Anders] Brevik and his colleagues have fed the robot with lots of pictures of various weeds.

The robot can then browse through the album and compare while it drives on the field.

“If it’s a weed, the robot gets ready,” he says.

In an instant, it releases a poison droplet, small as a grape seed, precisely targeting the weed.

“Our robot ensures the poison is accurately deployed onto the weed,” Brevik assures.

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“It’s great that agriculture gets robots like this. It means we can use much less herbicides while the plants we eat grow better,” researcher Klingén says.

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