

Cutting hedge technology

Not wild about pruning your roses? Leave it to this robot

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WHEN the hedges are running wild and the rose bush is becoming a thorn in your side, it's time to leave it to Trimbot.

Scientists have developed a robot that can trim hedges and prune roses while the owner sits back with a, ahem, well-deserved gin and tonic.

The researchers added a robotic arm with secateurs and a rotating blade to the base of a lawnmower. But what really sets Trimbot apart is its computer algorithm.

The technology uses pictures of perfect topiary as a template to trim bushes, while judging the position of rosebuds to prune above them on a stem.

But the device won't be cut-price, with an expected cost of about £1,000 when it goes on sale within five years. After all, it uses hi-tech 3D cameras to avoid trampling over the flowerbeds.

It is slower than the average gardener, as cutting a bush takes five minutes to scan its shape, another five to plan, then about 20 minutes approaching it from different angles with a blade.

But researchers hope to make it faster, while adding a suction tube so it can pick up its cuttings.

Professor Bob Fisher, from the University of Edinburgh, who led

the Trimbot2020 project, said: 'We call this our "cutting hedge" research. Getting the robot to work reliably in a real garden was a major feat of engineering.'

'It could help elderly people who enjoy their garden but don't have the mobility to do all the work, or give any gardener a break.' The robot took 45 scientists in eight countries four years to invent.

Trimbot's owner must create a digital map of the garden and send it around a few times to learn the terrain. A click on the map selects a bush to cut, with an emergency stop button in case the robot gets carried away.

