

First ever working sweet-pepper harvesting robot

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The European research project Clever Robots for Crops (CROPS) for the development of robotics in horticulture and forestry was recently accomplished. The project has been co-ordinated by Wageningen UR Greenhouse Horticulture and was co-funded by the Dutch Horticultural Product Board and has also led to the development of the sweet-pepper harvesting robot.

The four-year's research [project](#) with thirteen partners from ten different countries has led to a universal robotic platform for producing and harvesting high value crops. There were demonstration robots developed for selective harvesting of sweet-peppers, apples and grapes, and for precision spraying of pesticides. Sensor systems for [obstacle avoidance](#) for forest machines have also been developed. All robots use the same type of modular system and the same software architecture. This makes it easy for example to use a different camera or different type of robotic hand.

Important milestone in harvesting

The sweet-pepper harvesting robot developed in Wageningen is able to locate, to approach, to hold, to detach and to collect ripe fruits. The picking success rate of and the needed cycle time in practice is so far insufficient for commercial use, but with the first ever working sweet-pepper harvesting robot in a realistic environment an important milestone has been reached. Experiments in a commercial greenhouse have yielded a wealth of data and information.

Further development of the pepper harvest robot

Recently, a new European research project was awarded to Wageningen UR for a period of three years. This new project will specifically focus on the further development of the pepper harvest robot.

Provided by Wageningen University

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