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**Autonomous Greenhouse Challenge 4th Edition**  
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## News

# As a greenhouse manager, you must always be on standby

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As a crop manager, Milou Fernandez has to make sure that everything in the greenhouses of the Autonomous Greenhouse Challenge works and keeps working. During her rounds of the greenhouses, she sees increasingly obvious differences between the development of the teams' tomato plants. As harvest time approaches, Fernandez will be found in the greenhouses even more often. "My role requires a lot of flexibility. I have my own Challenge within the Challenge."

As many as 4,500 pots Milou Fernandez had to sow for the Autonomous Greenhouse Challenge. Then to care for them and - once the seeds had grown into plants - to repot them as well. "Fortunately, I didn't have to do this all by myself, but had help from a few colleagues. We distributed the pots among the six

greenhouse compartments, five of which are used by the participating teams and one by a team of WUR experts, the reference greenhouse. Once we had prepared all the pots and provided them with a dripper, the Challenge could start running."

## Role as greenhouse supervisor

After an internship from her training as a crop manager, Fernandez was put in charge of 33 greenhouses. "I had just started as a junior crop manager when the previous manager retired. I was asked if I wanted to take over and I thought that would be a great idea. This included the greenhouses for the Challenge. After a few months of training, I started as the greenhouse supervisor. In that position, my duties include making sure that greenhouses are ready for experiments and performing related work, such as watering pots as needed. I am also the contact person for researchers."

## Control rounds through the greenhouse

During the Challenge, Fernandez can be found in the greenhouses every day. "Among other things, I do checks to detect errors. On the middle table of each greenhouse, for example, there is a measuring cup. We register whether it has actually watered. If it hasn't when it should have, something is wrong. There are also sometimes technical problems that I or someone else has to fix. When I walk through the greenhouse, I always check the plants. Then I lift them up to see how heavy they are. That is purely for my own information, I am not allowed to change anything else. All I can do is approach my contact person and ask if it is correct or not."

## Differences between the teams

On her rounds in the greenhouses, Fernandez notices clear differences between the teams in the choices made to control the greenhouse climate. "One greenhouse is a lot warmer or more humid than the other. Some teams have made choices in this that you don't often see in practice. Whether these ultimately turn out well will be determined by the final result. A good yield can be ruined by enormously high costs. The differences in crop development are becoming more and more obvious. In some greenhouses you really already see quite a lot of red fruit, while others are a little behind."

## Challenge within the Challenge



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