

Challenge opportunity: Sterile and biological healthy

global specialist in horticulture



Background:

Can you come up with ways to keep our water system clean, while maintaining a robust biological environment in the growing medium? Then be sure to apply to this Challenge!

Over the past year there has been an increasing discussion to keep the water system sterile (clean) or to develop a biological environment for 'good' bacteria. The main advantage of a sterile system is that all pathogens are killed, however, it might affect the bacteria in the rhizosphere which are needed for a robust plant growth. On the other hand, biological water systems are argued that they prevent pathogens from spreading due to the competition with other micro-organisms. The disadvantage is that it doesn't prevent the growth of biofilm in the water system which can clog it.

The main approach to move forward in this discussion is to focus on a sterile water system, and keep the growing medium biological robust. How? That's where you can come in. Is there a way to break down disinfectants before it reaches the medium? Or do you have a way to prevent the growth of biofilm within the systems?

We are looking for a student/start-up or enthusiast who is able to come up with new ideas and able to prototype these ideas. The WaterInnovator program assists with expert knowledge and setting up the prototype with you.

Research objectives:

- *Invent a way to keep the water system clean, while maintaining a biological environment in the growing medium.*
 - *What are the prerequisites of these technologies?*
 - *Design and develop a first (and perhaps more) prototype.*

Contact:

Friso Vos de Wael
Maartje Jung

friso.vos.de.wael@royalbrinkman.com
maartje.jung@royalbrinkman.com

