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Abstract

Soilless culture on substrates generates a large volume of drainage, due to the need of supplying an excess of nutrient solution to the plants, which is of great interest not to waste, for economic and environmental reasons. This drainage can be recycled through the preparation of new nutrient solution, or reused in the fertigation of other crops. Recycling involves the risk of spreading some diseases through the nutrient solution, and therefore it is advisable to use some method of disinfection. When reusing the drainage, there is less risk, if the irrigated crops are less susceptible to the pathogens that might be present in drainage. However, this option may oblige to a diversification of crops or even on the agricultural activity, in the case of using the drained nutrient solution to irrigate annual or perennial field crops for example. The most common methods to disinfect drainage are presented and also some measures towards its reduction and valorization.

Keywords: rockwool, growing media, salinity, nutrient solution, recycling, reuse.