Abstract:

While hydroponics provides quicker growth, heavier yields, and space saving production of plants, most of it is done using factory made chemical solutions in the water. This experiment explores the use of an organic tea in a recirculating Nutrient Film Technology (NFT) system in comparison with the vegetative growth of basil achieved in a chemical system. pH and Electrical Conductivity were measured throughout the experiment, while the pH was adjusted of the organic system to be comparable to the chemical solution. Finally the systems' efficiencies were measured by comparing the masses of the vegetative growth. In both trails conducted using different teas the chemical solution was more productive. Because of this the two organic treatments are deemed inferior fertilizer options, suggesting future research is needed to obtain a sustainable, organic fertilizer to be used in hydroponics.