1 Introduction

The "aquaponics principle" is generally seen as a sustainable method to recover nutrients from aquaculture waste streams by converting them into edible yield [**Forchino2017**]. However, while some researchers describe aquaponic systems as superior in plant growth in comparison with conventional hydroponic systems [**Delaide2016**], others highlight inferior growth performance of the crops. The latter group is often referring to imbalances in the plant nutrient profile of aquaculture effluents as one causative factor [**Seawright1998**, **Goddek2015**]. Despite these claims, no closer attention was paid to the chemical mechanisms determining the composition of the effluents from aquaculture systems until now.

2 Material and Methods