Hydroponic Floating System for Lettuce Production

Lettuce is one of the most common vegetables produced in hydroponics. It is amongst the first 3 vegetables produced in hydroponic crops around the world with tomato and bell peppers. Most lettuce production systems are designed around two ideas, either the NFT (nutrient flow technique) system or the floating raft system. The later system is of particular interest because it is highly economical and can produce bast volumes of hydroponic lettuce.
One of the main problems with raft systems is that the fact that the nutrient solution is constantly stagnant demands the use of pumps to circulate water and generate significant aeration. Without this precious oxygen reaching the plant's roots, floating raft systems experience high loses of yields in the form of dry weight, nutrients, etc.
Nonetheless, raft systems can be improved dramatically in order to avoid the recirculation of solution and aeration of the roots by mechanical means. This is done in an exceedingly simple way, by placing the raft not directly above the hydroponic solution but a few centimeters above from the solution itself.

The results are incredible. Without any mechanical aeration or movement, this hydroponic system achieves dry weights superior to any floating raft system published in peer reviewed literature. This research was done by horticulturist B. A. Kratky and was published in the year 2005.

So if you are searching for a cheap hydroponic system which can offer you lettuce in high yields with no power usage, this is precisely the way to go. I will publish a post soon showing how this can be done and how you too can enjoy this great system for lettuce cultivation.