

Aquaponics: Integrating Fish and Plant Culture

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Abstract—The integration of aquaculture with agriculture appears to be an excellent way of saving water, disposing aquaculture wastewater and providing fertilizer to the agricultural crop. The most prevailing issues of the modern aquaculture and agriculture is shortage of suitable land and water for the culture practice. Now a day in agriculture system tremendous use of pesticides to reduce the risk of disease and also increase the production which lead to affect the final product. It is neither possible to consume the pesticide affected food nor grow once own plants, due to scarcity of water and land. Under such conditions, there arises a need for portable agricultural system which uses less water, space and is purely organic. One such solution is aquaponic system. Aquaponic systems are recirculating aquaculture systems that incorporate the production of plants without soil. This can lead to cost effective, sustainable ways of organic farming independent of the need for comparable land space requirement.

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