

Comparing the Effects of Fish Hydrolysate and Fish Emulsion on the Growth of Okra (*Abelmoschus esculentus*)

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Agriculture is one of the main sources of food in American Samoa and one such common crop I will be using for my research is Okra. The food we have on the island is either imported or grown locally. Without imports, our island mainly relies on farming and fishing for food. Farming plays a big role in the development of the island and is also a part of the Samoan culture. The tropical climate and humidity makes the land suitable for planting. Alongside agriculture, fishery is also significant on the island. American Samoa is surrounded by a vast ocean that contains many valuable resources. One problem that happens every year is that fishing companies throw away large amounts of fish scraps. Instead of letting it go to waste, I utilized fish scraps to formulate an organic fish fertilizer that is sustainably sourced and available locally. Fish scraps fertilizers supply nutrients such as potassium, phosphorus, and nitrogen to crops, allowing them to grow larger, faster, and produce more food. On the island, fish is widely accessible, as are fish scraps. This is good for the environment because it contains a lot of nitrogen and may be produced locally.