

Polyculture vs. Monoculture: How Is Your Food Grown?

Description

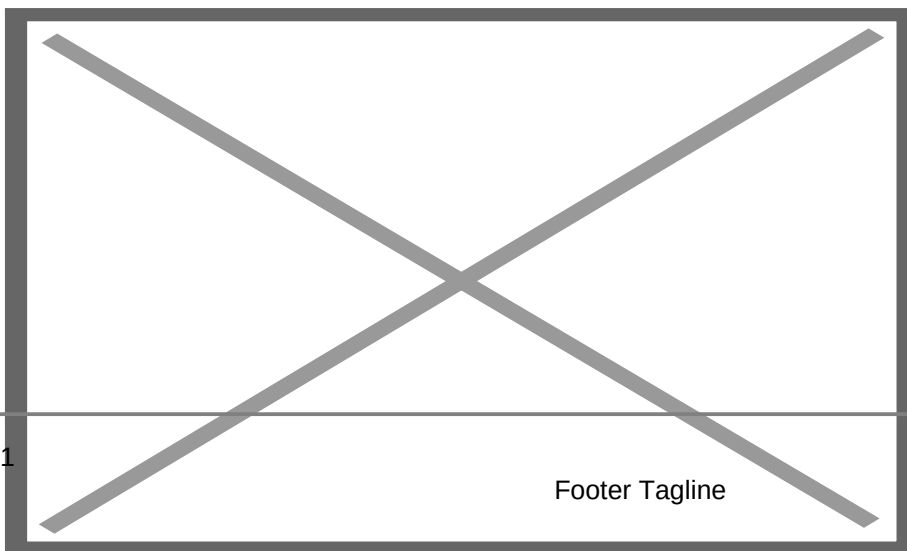
I used to think I was in the clear by sticking with whole fruits and vegetables instead of processed food, and felt I was providing my family with the best nutrition as a result. But, as it turns out, how produce is grown is something we should be weary of as well.



The great debate over GMO vs Non-GMO has its place here, but what Iâ€™m referring to is monoculture vs polyculture agriculture (thatâ€™s a lot of cultures!). This is something I never considered in the past, and only felt it necessary to buy organic for the common â€œdirty dozenâ€• produce. But, after reading a post by Darya on the [Summer Tomato blog on why she doesnâ€™t eat bananas](#), I had to know more.

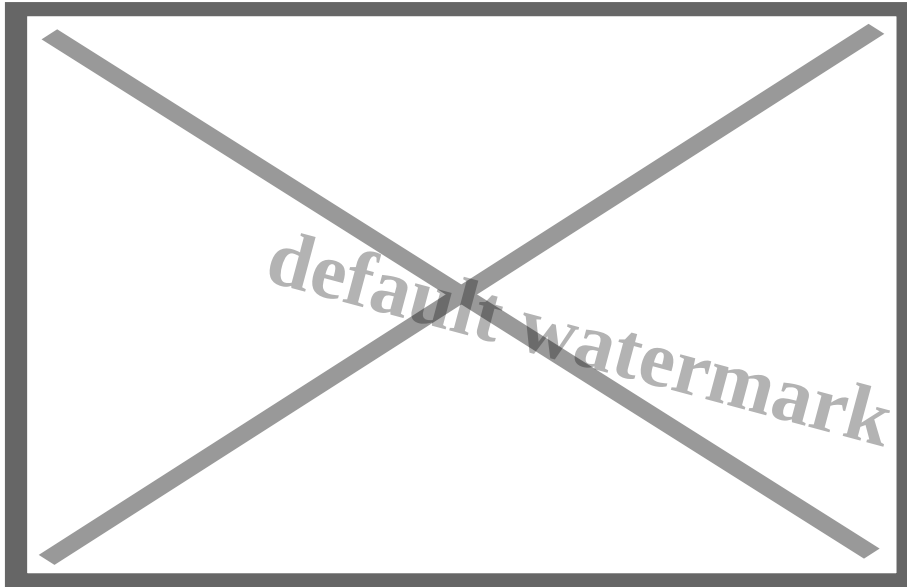
In her article, Darya leaves bananas off of her plate because they are something not standard here in the U.S. and she strives to source food locally by frequenting farmerâ€™s markets. She goes into detail on how bananas arrive in our stores, and hereâ€™s a quote from the blog:

â€œVirtually all of the bananas sold in the US are grown in Latin America by a handful of countries including Panama, Honduras and Costa Rica. In these places bananas are grown year round, are harvested while unripe, then shipped in special refrigerated compartments until they reach their destination weeks later. The fruit is then exposed to ethylene gas which causes it to ripen and turn their characteristic yellow (not their natural color when tree-ripened).â€•



Source: Sciencedaily.com

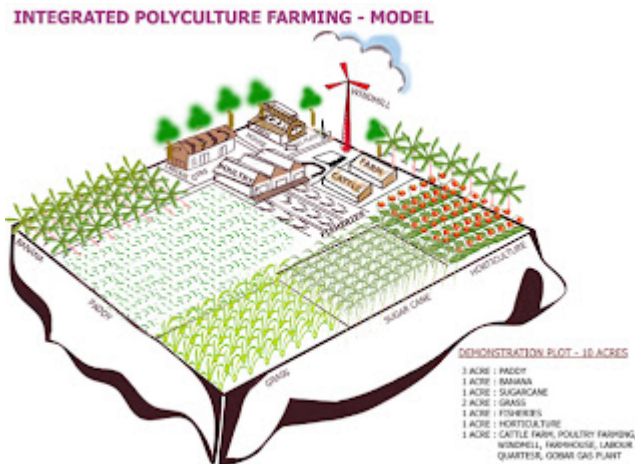
As I found, after doing some digging on Google (Digging?â€¦. Gogging?), most of the produce we see in stores is grown in [monocultures](#) (growing one single species of crop in a wide area) which leaves the entire crop susceptible to disease. This could seriously affect a crop's yield for a particular year since the disease can kill the entire crop in the area. Think of the [Great Irish Potato Famine](#) where the entire potato crop was wiped out and many people died because of their vast dependence on this one crop.



Source: Heirloomtomatoplants.com

For [polycultures](#), multiple crops are grown within the same area to mimic the natural ecosystem. A good example of polycultures are the [heirloom](#) produce items like tomatoes. The funky colors and shapes are a result of different tomato species. The advantages for polycultural over monocultural farming via Wikipedia are:

- The diversity of crops avoids the susceptibility of monocultures to disease. For example, a study in China reported in Nature showed that planting several varieties of rice in the same field increased yields by 89%, largely because of a dramatic (94%) decrease in the incidence of disease, which made pesticides redundant.
- The greater variety of crops provides habitat for more species, increasing local biodiversity. This is one example of reconciliation ecology, or accommodating biodiversity within human landscapes. It is also a function of a biological pest control program..



Both polyculture and monoculture can provide huge crop yields. Polyculture provides resistance to disease which aids in the decrease of pesticide use, production of diverse foods, stronger crops. Also, the variety of crops increases local biodiversity which improves pollination and more nutrients in the soil. Monoculture practices are very efficient and can bring higher crop yields as there is no competition from other rival species.



To me, polyculture farming is the best way to produce crops as it more closely resembles how plants grow in the natural world without farming.

Will this influx of new information make me swear off the aforementioned bananas and all other monocultural produce? Probably not, but now I'll be more mindful of the items at the store and look for ways to buy more heirloom or polyculture fruits and veggies. I enjoy bananas ([see my blog from the past](#) for proof) and other produce too much to cut them out completely, but my consumption has dropped and even if not on the [EWA's Dirty Dozen](#) list, I choose organic for more reasons than just pesticide exposure.

No matter what this or that study shows on the safety of some of these foods grown under less-than-ideal conditions, I choose to make what I feel is a healthier choice for our small family, and Going Mom and Avery seem happy with my choices; here they are glowing radiantly helped, somewhat, by a non-gmo diet —™m sure!



How will this information affect your next grocery trip?

Do you choose food based on what's labeled as safe or "dirty"?

Date Created

2015/01/06