

The Importance of Soybeans for Local Organic Sustainability: Primary Human Food for the Current Age

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Fireworks and noodles generally come to mind when considering major contributions that the Chinese have given the world. Yet in the long run and for the betterment of all of our lives, it is the origin and domestication of soybeans in Northern China more than 2500 years ago that is having an enduring and significant impact on all of us.

As human population increases, so does our need for protein. As we grow from babies to adults, we have a great primary requirement for protein, and for these reasons, soybeans have been an essential food plant for thousands of years in China and for a millennium in Japan. Recorded history dating soybeans reaches back to the Chou Dynasty in 664 BC. High yields of protein and oil are achieved by the cultivation of soybeans.

Consider the multitude of food products made from soybeans in the USA now: consider tofu, tempeh, tamari, miso, soymilk, soy yoghurt, tofurkey, soysage, amasake, tvp (texturized vegetable protein, soyakaese, soyburger. One can see that local sources for organically grown, non-GMO soybeans are crucial for a healthy and sustainable community.

The easiest and most straightforward soybean crop is edamame. Fresh, green, steamed soybeans in the pod. In our gardens, soybeans are planted first in April, then in May, and sometimes even to June and July. This gives fresh green pods for five months or more. The fresh, green pods are steamed to cook the seeds, inactivate proteins that inhibit our digestive enzymes and promote their digestion.

Generally they are lightly salted, though we find this is not necessary, and served as snacks or for lunch or dinner, a delicious high protein food easily grown in our gardens.

While the green pods of most soybeans can be edamame, some like Aoyu, Mid-green, Hidatsa, Kohala, Pando, Tohya and Hakucho have been selected for large, green, plump succulent seeds high in protein. Others like Nen Feng are higher in oil, have a different flavor, and have yellow seeds. T261, also choice for edamame has tan plump seeds.

Soybeans vary in protein from 24-45%. Soybeans vary in oil from 17-35%. Thus the different cultivated varieties can taste quite different from one another. Further, some cultivars are a foot tall, other are 3-4 feet tall with twiners coming from the top of the plants. Some mature every early, others mid-season, and yet others late in the growing season.

Soybeans are grown in most countries of the earth. Peace Seeds 2005 carries seeds for 29 of them. Synergy Seeds, Orleans, California has a good selection of soybean cultivars as does Sourcepoint Seeds in Paonia, Colorado. The Seed Saver's Exchange in Decorah, Iowa has an extensive, well maintained and growing soybean collection.

Then come the preferred kinds for tofu, miso and tamari. Of this I know little. Vinton 81 is considered excellent for tofu. I suspect that the bicolors were selected for miso. The smaller seeded ones may be preferred for tempeh. Like our common beans, some cook quicker than others, likely the same for soybeans. Last winter we made tofu with Black Hokkaido ,which made superb tofu. It was aided by going to the coast, coming home with 7 gallons of seawater, boiling it down, crystallizing off the sodium chloride salt, and concentrating the residual juice, the nigari, which we used to precipitate the tofu from the hot soymilk. We also made a batch from seeds whose label was lost and it was also great. I had forgotten how extraordinary a process is the making of tofu. Miso is on the agenda.