

Anyone Growing Apios?

By Al Chomica - May 2020

It is May 9 and our gardens are in the middle of a sunny, warm spell that is moving many plants along. The weeds are doing great and while weeding a raised bed I saw a small hairy shoot climbing out of the ground and reaching for the sky. And then I saw another and another. Yes!



The emergence of these shoots represents a three-year experiment to grow groundnuts. *Apios americana*, also known as the American groundnut, was introduced to our Nanoose gardens three years ago and has proven to be a valuable and welcome addition to our food forest.

I bought a few tubers for 20 bucks and planted them in a raised bed. They may have sent out a few aerial shoots in their first year but the real growth was underground at about a four-inch depth level. I didn't know it at the time, but they were proliferating and developing a vast network of thick roots and nodules throughout the entire raised bed.

In their second year, there were over a dozen plants that sprung up in random locations. I stuck a long branch in the ground at a 45-degree angle beside each plant so they could climb up and outside the bed - and they do like to stretch out and grab onto anything solid.

By July the raised bed hosted a variety of plants that were growing under the ground and on the surface, but the Apios vines had all reached for the sky and intertwined to make a delicately interlaced matrix up to six feet in the air. All the stakes were eventually connected by the trailing vines and when they threw out their showy flowers in late summer it was truly a spectacle to behold. They had thousands of flowers although not one of them set seed as far as I could tell.

The mutual growing conditions of this bed were amazing. The normal plants I grow in that bed are ones that I can come out of the kitchen to grab for meals, like tomatoes, basil or lettuce. They all grow on the surface yet the mat of entangled Apios, with its thin, aerial leaves, allowed enough sunlight to pass through to reach the plants below it. And I suspect it may also be a Nitrogen-Fixer based on how dark the green tomato leaves were.

The Apios leaves were collecting sunlight and transferring their energy down the vine into the underground part of the plant. It was like it was a dual bed where the Apios did its own thing without affecting the rest of the plant's growing conditions or vice versa.

When dug up the plant revealed that it forms a thick, woody root with swollen nodules every few inches. These grow into large tubers over a year or two that are easily harvested below the surface. This bed will now be in year three.

This image shows the rooting structure found right under one plant. All of these nodules had runners going off in different directions. They weren't huge but they were plentiful. I read that one should allow these tubers to grow for three years before they get to a decent size. It is no wonder they are not grown commercially.



In the final image, one can see the crisp, white flesh after peeling. The tuber is very heavy and dense and exudes a sticky white glue that can be seen on the bottom tuber. It is like a latex except it has a great flavour. When sliced they jump apart, almost as if they are brittle and under pressure. I have never experienced a plant with parts like these tubers before.

And the taste? Well, I've eaten many different varieties of vegetables over the years, but I would have to say this may well be the best tasting and best textured vegetable of them all. The best description I can think of is that it is like a super-crunchy potato with an exquisite, nutty flavour. All parts of the plant are edible. The showy flowers make a nice colourful addition in any salad and the petals can also be dried and mixed with sea salt to make a tasty 'flower salt'.

Another unique aspect of this plant is that it is quite uncommon. It can be found in the USA but because it is a tuber it is not allowed entry into Canada. A grower in Duncan found out I had 15 Apios in pots and drove to Nanosee to buy them all immediately. The grower had been searching for the tubers for four years. It's nice to grow a tasty plant that also puts money in one's pocket!

Growing *Apios americana* is a different kettle of fish that requires the patience of a gardener. It truly is a plant of worth that will now make its way into all our raised beds to be harvested on a staggered and rotational basis every three years...

