During the winter months, some gardeners spend their time poring over seed catalogs and dreaming about new types of vegetables to plant, new native plants that are available, new cultivars on the market, or trying something exotic. Does this sound like you? Let’s go for something exotic this year and try an edible tuber.

A few years ago, I was introduced to edible tubers. Of course, everyone is familiar with potatoes and all the different types available here in Northeastern Ohio, but how many people know about the many types of edible tubers cultivated around the world for centuries and used for nutritional and medicinal purposes? Together with information found at an exposition at the Brooklyn Botanical Garden, one at the Montreal Botanical Garden and a book published for one of these expositions, we can explore a few tubers that grow in our area.

**Oca or Oxalis tuberosa or New Zealand Yam**

This tuber is native to the Andean highlands and is an ancient Incan crop. Although it was grown high in the mountains, it is easily grown in Northeast Ohio. It excels in average soil and full sun and tolerates a wide pH range from 5.3 to 7.8. One big advantage with Oca is that it is not susceptible to blight. It is hardy to Zone 8 so the tubers must be dug up and stored over the winter. This plant is a short day crop and does not start to form its tubers until the days grow shorter in September. The crop is harvested after the tops are killed off by a hard frost. Oca produces tubers with a slightly tart, lemony flavor, so no need to add sour cream. The tubers are 2½-4 inches in length and resemble new potatoes. They can be stored for months in a cool, dry place. They can be boiled or roasted like potatoes or eaten raw or in salads. The tubers contain up to 9% protein and are a good source of calcium and iron. The only problem is finding the tubers to plant. They are available through some internet sites. (see next page)

**Jerusalem Artichoke, Sunchoke, Helianthus tuberosus**

The Jerusalem Artichoke can be found in Northeastern Ohio and is familiar to some gardeners already. It is native to North America, from Canada to Georgia. It grows in damp places in good soil and is often found at abandoned farmsteads and on the edges of woodlands. The Jerusalem Artichoke was an important food source for Native American tribes who foraged for the wild tubers. It is reported that Native Americans cultivated this tuber in the 16th century in order to have a larger, less knobby tuber.

The Jerusalem Artichoke is extremely easy to grow. The plants can reach 10’ in height and are a perennial. In late summer, the plants bloom with a large yellow flower similar to a sunflower and are in fact in the same genus. Your Jerusalem Artichokes can not only be a good source of food but a late bloomer in the perennial bed.
There are many cultivars of the Jerusalem Artichoke available. Plants require moist, fertile soil in a sunny location. The tubers should be planted 3-4” deep and 2' apart. Harvesting time is about the same as for Oca. The tubers are ready for harvesting after the first hard frost has killed off the tops. The tubers can be eaten peeled and raw in salads or steamed, fried, baked, pickled, boiled or pureed. The tubers are a good source of iron, potassium, and phosphorus.

Bolivian Sunroot, Yacón (Spanish). *Smallanthus sonchifolius*

Yacón is a Peruvian and Bolivian cousin of the Jerusalem artichoke. The plant was highly prized by the Incas. Today, it is still cultivated in South America but is also prized in some circles as a gourmet vegetable. Yacón is easy to grow and plants reach 3’-9’. The plants prefer moderate light and well-drained soil. They are heat tolerant but cannot withstand temperatures below 32 degrees F. In our zone, they are considered an annual. Yacón tubers can be propagated using pieces of a tuber from the previous season.

The interior of the yacón tuber is the edible part. The flavor is similar to that of the Jerusalem artichoke. Like the Jerusalem artichoke, the sugar comes from inulin, not sucrose, making this an excellent food for diabetics. The tubers are sweet when cured in the sun after harvesting. They can be eaten fresh, like fruit in a salad. They can also be baked or stir fried. Nutritionally, the tubers contain up to 2% protein, less than 1% fat, and good amounts of calcium, phosphorous, and vitamin C.

A Master Gardener’s Experience

I have tried Jerusalem Artichokes and found them easy to grow and prolific. They are maybe too prolific if you do not really love them as a food source. This year, 2016, will be my third year to grow Oca. By all accounts, Oca is easy to grow but I have learned that you need the right place and need to space them for higher yields. The second year yielded enough for one meal for 2 people but the taste was unusual and we really enjoyed the flavor and so, this year, I am determined to grow a good crop. I have also purchased a yacón plant and will try this in 2016 as well. My source for these plants is listed below.

While you plan your 2016 vegetable garden, why not experiment with a small part of your garden and try a tuber that is more exotic than a potato. There are many to choose from and you will be able to try vegetables that are not available anywhere but from your own garden.

References:
https://www.youtube.com/watch?v=vCzTHz5HCPs (YouTube Video on Oca)
Buried Treasures: Tasty Tubers of the World Brooklyn Botanical Garden
Source for tubers: Nichols Garden Nursery: Herbs and Rare Seeds
NicholsGardenNursery.com
Oca photo-www.healwithfood.org
Yacón photo-www.ahualoa.net