

THE EDIBLE GARDEN

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Yacon

Esther Bryan
Master Gardener of Ottawa Carleton

One thing interesting about trying and growing unusual crops is finding stand-out stars - plants that are easy to grow, relatively pest free and high yielding. Of the unusual root crops, some satisfy this criteria, but not all. Ground nut (*Apios americana*) is a native perennial root crop that is also a soil-fortifying legume. However, it takes two years to achieve any worthwhile crop and thereby fails the high yield criteria. Many of the Andean tubers as another example (*Oca*, *Oxalis tuberosa*, etc) come from equatorial latitudes and are adapted to only form tubers once the hours of daylight shorten to a certain point. This far north in Canada, days only reach this length after September when the number of remaining frost-free days is minimal, so growing these tubers to maturity is unfeasible. One must be very picky about which crops have potential for our tough climate.

Fortunately, an unusual root crop does exist that is adaptable enough to meet our climatic conditions of short summers and long days, and also has high enough yields to be worthwhile. Meet Yacon, or Peruvian Ground Apple (*Smilax sonchifolius*). Yacon is a big blowsy sunflower relative with unremarkable flowers that will produce typically around 5 kg of tubers from one plant, although likely less here in Ottawa. I was first introduced to this plant by Telsing Andrews of [Aster Lane Edibles](#)*. After I attended one of her root crop lectures featuring yacon, she sold me a purple rooted cultivar. The plant lived up to all its promise next summer. Despite the drought of 2018 and heat, I had around 4.5 kg of roots dug up in October.

Geographically, yacon is native to the moist and warm eastern slopes of the equatorial Andes, yet the clones sold here seem to have no particular issues with the long hours of daylight of northern locales. It requires the entire season however, plus a head start, to give a worthwhile crop, but makes up for this in ease of growing. Yacon is related to Jerusalem artichoke (*Helianthus tuberosus*) but without the irksome habit of spreading across the yard like a weed. The plant is large — count on allocating at least 0.8 square metres of good well-draining garden soil in your plot per plant. It will reach 1.2-2.2 m in height with big fuzzy leaves. It is a sun lover, and its large watery tubers require ample moisture to achieve their size. Yacon doesn't tolerate frost during the growing season and prefers moderate temperatures, similar to its native climate.



Yacon plant



Yacon root

Esther Bryan



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Bee Line Trees for Bees

Julianne Labreche
Master Gardener of Ottawa Carleton

Spring in Ottawa is such a glorious time of the year, as any gardener will attest. After our long, harsh winters, the beauty of flowering trees seems positively breathtaking. It's not only gardeners though who enjoy flowering trees. Pollinators appreciate the sights and scents of spring-blooming trees too, relying on early spring blooms for survival. So, why not plant a tree to help the bees?

There are tree species, including natives, which would be a good choice to support our local pollinators. The skill comes in choosing the right tree for the right place on your property, remembering to keep in mind overhead power lines, underground cables and the proximity to your home. Tree roots can damage the foundation of a house. That tiny sapling can grow into a big tree. The wise gardener plans ahead before digging, measures carefully and considers sun or shade and soil requirements.

Depending on the size of your property, here are some bee-friendly trees to consider:

EASTERN REDBUD (*Cercis canadensis*): This spectacular spring bloomer is native to many parts of North America. With its showy magenta flowers, it will attract bees.

The primary edible part of yacon is the sweet-potato shaped storage roots attached to the central root mass, this being more circular with knobby propagative rhizomes attached below the stems for next year's plants. When starting a new plant, you will be purchasing the propagation rhizomes (yacon rarely sets viable seed), and it is critical to protect these from desiccation, as I was duly warned. If sprouting, the rhizomes should be potted up in a cool, dry spot with some light to grow, until the weather is frost-free and they can be transplanted outside. If the rhizomes are dormant, store in vermiculite like dahlias until April when they should be potted up and started inside to get a jump on the season. In our short summers they need the time to achieve a good harvest. Once planted outside in the sun and warmth of summer though, look out! They will be big healthy plants in no time. Mulch for moisture retention as this crop requires lots of water to make those big watery tubers.

When the frosts of fall start to regularly threaten, start to think about pulling your plants. It will not be an easy task: the root mass is very large and unwieldy with brittle tubers. Avoid breaking the tubers as these spoil quickly; any damaged tubers should be used up first. Ideally, most (but not all) of the storage tubers can be removed and stored to sweeten for a month. These contain large indigestible sugar molecules that over time break down to release simpler sugars like fructose and glucose. As time goes on the stored roots will be noticeably sweeter, but, watch for desiccation and moulding. The tubers have a flavour like an apple or pear with a celery overtone.

As for the propagation rhizomes, the unbroken mass should be stored in vermiculite and not allowed to dry out. If broken apart, individual stems with rhizomes are left; pot these up in potting soil and keep in a cool, dry location. This is for next year's crop and each rhizome can become a new plant.

Consider sharing extra rhizomes with a friend or two - unfortunately yacon for propagation can be hard to come by.

For food preparation, yacon roots are typically peeled and chopped up to be eaten fresh in salads, or they can be boiled or baked. The root can also be used to make sweet syrups. Yacon was used by the Inca and has a long history of use in South America. Nutrition-wise, being made mostly of water and with those large indigestible sugar molecules, they have little value, but make an excellent prebiotic for digestion.

In conclusion, yacon is a little known but easy crop that has great potential for success in Ottawa; I hope you will give it a try!

*Many thanks to Telsing for lots of advice and guidance with this plant. Another source of information for gardeners interested in unusual root crops is [Cultivariable](https://www.cultivariable.com/). (<https://www.cultivariable.com/>)

PREBIOTICS: Contain fibre that is not digestible. In the large colon this ferments feeding the desirable gut bacteria (including probiotics), stimulating growth of the bacterial colonies, thus improving intestinal health.

Birds in Winter

Judith Cox

Master Gardener of Ottawa Carleton

Today the sun is sparkling on the snow, but the air is biting cold. The woodstove is crackling, and my tea is sweet and warm. Of course, there are piles of seed catalogues scattered about at my feet as I imagine the glorious garden I'll have this summer.

Outside of my front window I have two suet holders, a sunflower seed feeder and a feeder with thistle seed. I have observed several birds at my feeders, and I encourage them all through the winter. My favourite bird is the chickadee. Right now, there are chickadees flitting about the feeders; they are rarely aggressive, and are becoming quite tame when I approach them. Chickadees eat seeds throughout the winter and switch to bugs and insects once the weather warms. I read a study about five years ago in *Birds and Blooms magazine* that said chickadees eat more mosquitoes than any other bird. Mosquitoes

It is a large tree with broad heart-shaped leaves. Nevertheless, with a height when mature of about 9 m and a spread of about the same size, make sure that you have the space for it.

RED MAPLE (*Acer rubrum*): This is another big tree, growing 18 to 27 m tall and therefore not suitable for a small urban yard. The red maple is a native tree that grows in swamps and forests in many parts of North America. When little else is growing in early spring, it is a veritable oasis for hungry bees.

SERVICEBERRY (*Amelanchier spp.*): This is another native tree enjoyed by bees for its fleecy white flowers and by birds for its tasty blue-black fruit. It is a medium-sized tree with a height of 4.5 to 12 m and grows in full sun to partial shade. It is one of the first trees to bloom in spring.

FLOWERING CRABAPPLE (*Malus*):- There are many species that bloom in Ottawa, all of them putting on a spectacular show of colour come spring. The Brandywine Flowering Crab (*Malus 'Brandywine*) grows well in our 5a zone, with a height of about 6 m. Depending on the species, some may require fall cleanup.



Crabapple

Julianne Labreche

MAGNOLIA: These are smaller trees with lovely cup-shaped flowers that look like small tulips in springtime, often appearing before the leaves. The flowers appear in different colors, depending on the species—yellow, burgundy, white and fuchsia. Yellow is a favoured color by bees, so consider the Butterflies Magnolia (*Magnolia 'Butterflies'*) or the Judy Zuk Magnolia (*Magnolia 'Judy Zuk'*), both sold in Ottawa and suitable for this zone.

MOUNT ROYAL PLUM (*Prunus 'Mount Royal'*): This is a pollinator tree that requires full sun. With its showy white flowers, it

tend to like cedar trees and that is where chickadees prefer to nest; it's a winning situation.

My feeders also attract various sizes of woodpeckers; they help to maintain the health of my trees. There are also blue jays with their amazing blue feathers and bright red cardinals. Sparrows, finches, cowbirds and starlings are also frequent visitors and descend on the feeders in large noisy groups. Of course, there are squirrels and mice in the mix, but I try to have the feeders as unfriendly to rodents as possible, swinging from weaker branches or places that are not easily accessed.

Every November I purchase a pine wreath from the local boy scouts. It smells so fresh each time I open the front door. Now that winter has settled in, I hang the wreath around the feeders. This gives the birds an extra place to take shelter and it helps to protect them from being as vulnerable to hawks. Given the opportunity, hawks and owls will swoop in and catch birds right off your feeders!

I am also very careful about what I use on the ice near my walkways and driveway. Wood ash works well on the driveway, but it really tracks in the house, so I avoid using it on the walkways. There is an eco-friendly salt alternative that you can use but I find it quite expensive. I never use salt - it seeps into the surrounding soil and kills the vegetation. It also hurts my dog's paws and makes my boots look nasty. On the walkways I use a scattering of kitty litter or chicken feed. The chicken feed must be replaced regularly, as it's too tasty for wildlife to ignore.

Remember to invest in chickadees and other helpful birds this winter and you will reap the rewards in the summer.



Winter Garden

Judith Cox

Recipe: Mashed Potatoes Four Ways

Dale Odorizzi
Master Gardener of Lanark County

While Mashed Potatoes are a wonderful side dish, use your herbs to spice them up.

Into 4 cups of mashed potatoes fold:

CHEESY CHIVE—1 cup Cheddar cheese and 2 Tablespoons snipped chives

ZINGY BACON—3 strips crumbled cooked bacon, 1 ½ Tablespoons horseradish and 1 ½ Tablespoons parsley

GARLICKY HERB—2 Tablespoons fresh chopped basil leaves, ½ cup grated Parmesan cheese and 1 clove of garlic, finely chopped

ROSEMARY— 2 teaspoons (or to taste) fresh finely chopped rosemary, pinch black pepper, ¼ teaspoon grated nutmeg, ¾ cup cream

Watch for *Trowel Talk* the Master Gardeners of Ottawa Carleton electronic monthly gardening newsletter available on the 15th at <http://mgottawa.ca/>

Visit the Almonte online community newspaper 'The Millstone' - <http://millstonenews.com/> - for a column by David Hinks of the Lanark County Master Gardeners; under the Gardening tab.

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too will attract bees. It grows well in our zone, with a height of 6 m and a spread of about the same.

Before you plant, shop around. Ask questions before you select the tree of your choice. Try to consult with a horticulturalist. It may save you future trouble and expense.

Planting a bee tree is a wonderful way to honour the memory of a loved one— especially someone who loved to garden. When it comes to helping pollinators, remember—it's not just about flowers. It's about trees too.

Chayote - Another Squash!

Faith Schmidt
Master Gardener of Ottawa Carleton

My husband and I are always looking to try new vegetables and fruits, whether to grow them or savour them in a new recipe. While in a local produce store, we happened upon an interesting looking specimen and both of us thought ..."Why not?"

Arriving home with this interesting looking vegetable, we looked up some information on it online. Part of the Cucurbitaceae family, this squash, Chayote (rhymes with coyote), *Sechium edule*, is high in vitamin C. Native to Mexico, it has spread to other Latin American countries. It is also known as Merlito Squash.



Chayote

Faith Schmidt

As I was cooking potato wedges last evening, I decided to treat the chayote the same, cutting it into wedges, dipping it in a mixture of melted butter and sunflower oil, lightly sprinkling it with salt and pepper and baking it at 205°C/400°F for about 30 minutes. It was delicious, tasting somewhat like zucchini. Definitely a worthwhile purchase!