

## Growing Your Own Sugar?

Happy New Year to each and every one of us! This is the week when resolutions abound: most of them will die on the vine before the month is out but we trust the resolution to eat healthily and economically will survive until time for spring planting. A universal resolution most often made and most often broken is the one centering on those pounds we need to shed.

Since our collective intake of sweets has blossomed, gardeners are asking if it is possible to grow a non-caloric sweetener for summer lemonades and winter pies. Between 1970 and 2005 our eating and drinking of sugars jumped 20%. In 1965 we got 12% of our calories from beverages and in 2001 the percentage had risen to 21%. Can you believe we gobble up 22 to 30 teaspoons of sugar a day?

That translates into 350 to 475 empty calories. 'Empty' is defined as calories that are devoid of any nutrient value to our bodies. Incidentally we drink more of those empty calories than we eat and unfortunately the drinkable ones do not fill us so we keep on eating in order to feel full.

Of course there are substitutes for sugar in artificial sweeteners but most have an unpleasant aftertaste or raise health questions. The herb Stevia is not new but it has become not only newsworthy but is currently offered to gardeners in seed catalogues. Master Gardener Zach Loesch did the research on the history of this plant and shared it with fellow gardeners. Thanks Zach!

Stevia was once considered a member of the daisy family but has been reassigned to the Asteraceae family to which chrysanthemums belong. Stevia (*Empathorium rebaudiana*) seeds are in the 2014 Vermont Bean Seed Company catalogue, 10 seeds for \$2.65. The Gardens Alive Company will ship you a perennial shrub in a 3" pot. An outside plant for zones 8 – 11, it may be raised as a houseplant because it is so pretty.

It can be used fresh, dried, powdered, or in liquid form to sweeten food and drinks without adding calories. The small leaves are smooth and round and the small white summer flowers grow in clusters. The height given is 18" to 36". It is perennial in zones 9-10 so evidently thrives in heat. It may winter over here in a protected spot.

Native to the highlands of Paraguay where it was used by generations as a sweetener for teas, it is now cultivated in over a dozen countries. In 1931 two French chemists researched the sweet factors in Stevia finding the crystalline compound released from the leaves to be 300 times sweeter than table sugar and without apparent toxic effects in various experimental animals.

The production of sweeteners from Stevia has increased tremendously over the decades and its use in Japan is particularly interesting. The Japanese began cultivating Stevia in hothouses in 1954 and the production increased dramatically when in the late sixties, the Japanese Government banned certain artificial sweeteners due to health concerns. There was also the concern about the connection between other sugars and diabetes, obesity, and tooth decay. Today the Japanese manufacturers have formed the 'Stevia Association of Japan.'

By its insertion into traditional Japanese culinary use it has been found that when combined with pickled vegetables, dried seafood, soy sauce, and miso products, the pungency of their sodium chloride is suppressed. Scientists in that country have discovered important information about the sweetener's behavior in various food processing applications. As other countries accept the use of Stevia as a food additive, the USDA has not accepted its use: all the more reason to grow your own.

Another development that is of interest to gardeners with little available space for 'new and improved' versions of old favorites is the number of fruit trees that can be found in dwarf mode. They include Venous Orange, Lime, Meyer Lemon, Banana and Dwarf Pomegranate. The only one of those that I have tried is the pomegranate: I had hoped for a snack-sized version of the large one seen in the produce aisle. It flowered charmingly but so far has not produced fruit. I passed it on to a better gardener so it may.

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