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photo by Tom Hewitt

Purple plants add a special quality to a garden. This is cathedral bells. See page 18.

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ON THE COVER

The more we learn about growing the spectacular desert rose, the better. See page 12. (Photo by Kathy Nelson)



photo by Frederick B. Essig

Queen Anne's lace is an ornamental member of the mostly-culinary carrot family. See page 36.

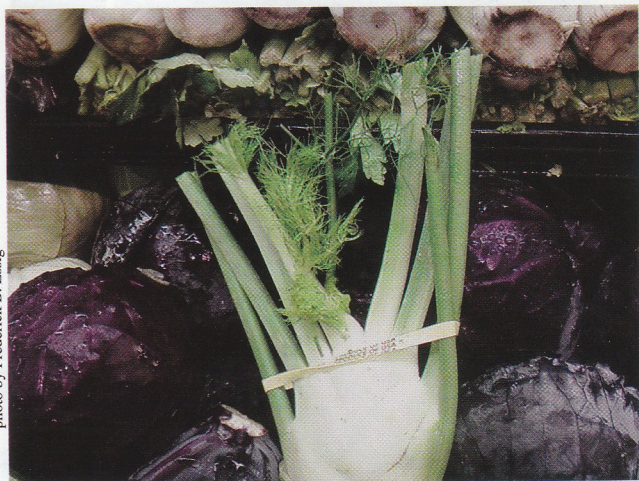
What's in a Family?

The Apiaceae

by Frederick B. Essig

In this magazine's Oct/Nov 2012 issue, we looked at how impoverished our diet would be without the varied members of the tomato family, the Solanaceae. There is another family without which our diet would also be a whole lot duller: the super-culinary carrot family, the Apiaceae.

Members of this family have small, mostly white, 5-parted flowers arranged in umbrella-like clusters called umbels. Though the flowers are nothing to write home about, they are sometimes massed together attractively. Wild carrot is known as Queen Anne's lace for the flat, lacy pattern of its white flowers, and is sometimes planted as an ornamental. Apiaceae fruits typically split apart into 2 "seeds." Technically, these are single-seeded fruits (schizocarps) with a thin, dry layer of fruit tissue around each.



Fennel is grown for its spicy seeds, as well as for its leaves and bulbous plant base.



Some varieties of celery are grown for their edible roots as well as their stalks.

Two of the best-known foods in this family are carrots and celery. Then there are parsnips, a pale-colored carrot relative said to be sweeter and a bit spicier. Parsley, cilantro, chervil, dill and fennel serve as leafy flavoring or garnish for a great variety of dishes. Fennel

is also a primary flavoring of the alcoholic drink, absinthe. Caraway seeds are used in North America to flavor rye or pumpnickel bread; the British are fond of caraway cake. Caraway is also used in curry, sauer-

kraut and Havarti cheese, and in a middle-eastern pudding popular at Ramadan. Dill, of course, is used in dill pickles and in eastern European soups, such as borscht.

It is hard to describe what these herbs and spices actually taste like, with the exception of cilantro, the foliage of the coriander plant. The first time I unwittingly admitted some of this obnoxious herb into my mouth, I was immediately reminded of the pungent odor of a caterpillar I had recently squashed as it was dining on the leaves of my favorite tangerine tree. I have not signed up yet at IHateCilantro.com, but am sympathetic to their motto: "The most offensive food known to man." It is variously described as smelling like soap or bugs by

photo by Frederick B. Essig

photo by Frederick B. Essig

the virulent advocates of banishing this plant from the planet. Oddly, the other half of humanity seems to enjoy this herb. Asians and Latin Americans in particular use gobs of it. My wife, who is Chinese, doesn't see any difference between cilantro and parsley. No other food I know has such a split personality.

The seeds of these plants contain unique and potent phytochemicals that serve not only as spices, but sometimes as medicine as well, but are there in nature to prevent animals from feeding on them. (We humans can't seem to take a hint!) The seeds of dill, cumin, fennel, anise, caraway, celery and coriander each contribute a unique flavor to foods, and each has been used in traditional folk remedies. Dill and fennel, for example have been used to relieve flatulence. Celery seed and parsley have diuretic properties, and celery, carrot and coriander are anti-diabetic. Oil of coriander has been used to flavor tobacco. Fennel and anise have been used as cough medicine, while dill, fennel, caraway and anise are used in herbal teas.

Of course, a medicine at one dosage becomes a poison at another. New mothers who partake of the above-mentioned herbal teas share the stimulant chemicals with their children through their breast milk. There have been reports of



photo by Frederick B. Essig

Parsley exhibits the complex compound leaves characteristic of this family.

neurological overstimulation in such second-hand herb-imbibers, but these fortunately are reversible. Celery, caraway, coriander and fennel can also cause an allergic dermatitis in some people.

Here's a surprise: carrot seed oil, used in skin treatments and a variety of herbal preparations, contains the hallucinogenic compound, myristicin, which is also found in nutmeg. (Maybe Bugs Bunny was onto something?) But as my friends who tried to get high on morning glory seeds in high school found out, the toxic side effects of euphoric drugs

may overpower any small pleasure derived from the experiment. Ingestion of myristicin causes nausea, vomiting, anxiety and headache, among other undesirable side effects.

Parsnip roots are an even more potent source of myristicin, especially if allowed to grow into their second season. (Carrots and parsnip roots are biennial plants typically harvested after the first season of growth.) Parsley and dill oil are also sources of the hallucinogenic drug.

The most famous poison from this family is poison hemlock, which was used to execute the Greek philosopher, Socrates. His disciple Plato described Socrates' death in detail in his *Phaedo*, as the condemned man himself described the numbness that slowly crept up his legs and then into his abdomen. They knew that when it reached his heart, it would be over. Actually, it was his lungs that were paralyzed by the poison. If artificial ventilation had been available at the time, Socrates could have been sustained until the poison wore off.

Apiaceae members may be edible, poisonous or somewhere in-between. But they certainly make our lives more interesting.



photo by Frederick B. Essig

Dill weed (dried leaves) and fennel seed are common in spice rack.

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