Fall 2011 Applegater

DIRTY FINGERNAILS AND ALL Parsnip o' parsnip: What is thy true self?

BY SIOUX ROGERS

On a very lovely, sunny afternoon, my ten-year-old niece Talya and I decided we needed to remove the entire bed of four-foot-tall parsnips. I decided the height of the leaves and the skimpiness of the roots were due to too much nitrogen in that particular bed. I needed to plant it with a leaf vegetable, say like spinach. Okay, so with that goal in mind, we sallied forth with a mission-which we accomplished.

But that was the good news.

Now for the bad news. The next morning I awoke with what looked like a giant "Mark of Zorro" on my left thigh and smaller red marks on my right thigh. And yes, I had been gardening in shorts, in case you were going to ask. These red aliens burned and small little blisters spread. J.D., who is frightfully allergic to poison oak, was convinced I had poison oak-even though I was not itching but burning—and popped an antihistamine pill into my mouth. I immediately started to yawn and announced that he and Talya would have to go to the coast without me as I would be in bed sleeping and scratching all day, probably at the same time.

Off they went, returning several hours later with bags full of poison oak remedies, because by now, Talya had the same red, burning marks but to a lesser degree. Detective J.D. began an interrogation of what Talya and I had been doing together. "Everything," I explained. That's how our parsnip adventure became the focus of what became an intense investigation. "So what family does the parsnip belong to?" J.D. queried. I am sure he thought it would be poison oak.

After much googling, I was shocked to discover that I had parsnip leaf poisoning. The following information is

he condition is a type of chemical burn rather than an allergic reaction and should be treated as such.

moderately technical, but very interesting

the form of a compound umbel, and has the same root as the word "umbrella."

The following is from a Northern Woodlands Magazine article subtitled "Danger in the carrot family":

"To the untrained eye, many members of the carrot family look alike. Poison hemlock and spotted water hemlock can be confused with

Queen Anne's lace; was shocked to discover that I wild parsnip can be *I* had parsnip leaf poisoning. confused with cow parsnip, which can be confused with giant hogweed, which can be confused with great angelica. Of all the plants just mentioned, though, only wild parsnip and giant hogweed contain sap that will significantly irritate your skin. (The hemlocks are very poisonous, but only if eaten.)

is a key difference between the photo toxic dermatitis caused by poison parsnip and the allergic contact dermatitis you get from poison ivy. Parsnip burns feel like burns, whereas poison ivy rashes are often more itchy and irritating than painful.

"While the pain from a parsnip burn is relatively short-lived, an encounter can

> leave long-lasting scars. As part of the recovery process, the body produces

dark pigmentation that is thought to

serve as a protective mechanism against further UV injury (sort of a super suntan). These dark splotches can linger on the body for years. In an interesting twist, people with psoriasis and similar skinpigment disorders sometimes turn the toxin to their advantage and use psoriasis



Photo left: First appearance of burning blisters (near knee) due to a close encounter with parsnip on a sunny day. Photo right: During recovery, these dark splotches can last for years.

"... The toxin in parsnip sap is different from the toxin found in poison ivy or poison sumac; the reaction your body has to it has nothing to do with your immune system, and everyone is susceptible. The harmful chemical compounds - specifically, psoralen and its derivatives - are photosensitizing, which means they're activated by ultraviolet (UV) radiation from the sun. (Smear yourself with parsnip sap in a dark closet, and nothing will happen.)

to help increase their skin's sensitivity to ultraviolet light.

"As its name indicates, wild parsnip is directly related to the edible parsnip growing in your garden. Like its domestic counterpart, the roots of wild parsnip are safe to eat and, by some accounts, quite delicious (especially in late fall or very early spring, after the plant has had time to convert its root starch to sugar). Take the time to properly identify the plant before you eat it, though, since other look-alike



Sioux Rogers—And the beet goes on. burning, tingling, and blisters (often in the shape of the streak where the plant juices brushed against the body) within 24-48 hours of exposure.

"When gardening parsnips, gloves and long sleeves are advised. If bare skin does come into contact with the upper part of a parsnip plant, the area should be washed immediately and kept out of sunlight. A cool, indoor area is best to retreat to, as sweat can aid in the absorption of the toxin, and sunlight activates its deleterious effects. Should a rash appear, the area may be treated similar to a burn and a physician or pharmacist ought to be consulted." ³

Despite all the warnings and dangers, parsnip has many saving graces, especially when the leaves are treated with respect. Wikipedia states that "The parsnip is richer in vitamins and minerals than its close relative, the carrot. It is particularly rich in potassium with 600 mg per 100 g. The parsnip is also a good source of dietary fiber. 100 g of parsnip contains 55 calories (230 kJ) of energy." ³

I hope that my experience keeps you from the same painful blunder.

> Parsnips so white, and roasted so sweet, then why do I fear thee in the summer's heat? —Sioux Rogers

Dirty Fingernails and All Sioux Rogers • 541-846-7736 mumearth@dishmail.net



and informative.

The following is from Wikipedia: "The Apiaceae or Umbelliferae is a family of usually aromatic plants with hollow stems, commonly known as umbellifers. It includes angelica, anise, arracacha, asafoetida, caraway, carrot, celery, centella asiatica, chervil, cicely, coriander/cilantro, cumin, dill, fennel, hemlock, lovage, Queen Anne's Lace, parsley, parsnip, sea holly, the now extinct silphium, and other relatives. It is a large family with about 300 genera and more than 3,000 species. The earlier name Umbelliferae derives from the inflorescence being generally in

When you get some sap on your

skin, the sap absorbs solar energy, then releases it in the form of heat. On a micro level, the psoralen molecule lodges between two strands of DNA, and sunlight fuses the strands together. "You can imagine what this does to an insect that tries to eat the plant," says [Tom] Vogelmann [a plant biologist at the University of Vermont].

"Parsnip stems are deeply grooved, which distinguishes them from other members of the carrot family.

"The chemical reaction damages skin cells and feels very much like a burn. This members of the carrot family have highly poisonous roots that could kill you." ²

There are many more articles about the hazards of parsnips, like the following article from Wikipedia: "While the root of the parsnip is edible, the handling of its shoots and leaves requires protective clothing. Like many other members of the Apiaceae family, the parsnip contains furanocoumarin, a photosensitive chemical that causes a condition known as phytophotodermatitis. The condition is a type of chemical burn rather than an allergic reaction and should be treated as such. Symptoms include redness,

Photo above: Horrendous blister on wrist of suffering parsnip gardener. (http://www.dailymail.co.uk)

¹ http://en.wikipedia.org/wiki/ Apiaceae.

² http://northernwoodlands.org/ articles/article/avoiding rash decisions _a_guide_to_plants_you_shouldnt_ touch. Reprinted with permission by Dave Mance III, editor of Northern Woodlands Magazine, www.northernwoodlands.org. ³ http://en.wikipedia.org/wiki/ Parsnip.

