Pretty Plants Sometimes Hide Secrets

By Susan Camp

One of the pleasures of writing the "Gardening Corner" every week is that many topics are offered to me in the form of questions or as in the case of this week's subject, public service announcements. When I receive queries or suggestions from you, I remain aware of the topics of interest to home gardeners and property owners on the Middle Peninsula.

I received an email from Gloucester resident Dr. David Justis concerning Euphorbia helioscopia, an herbaceous annual weed commonly called sun spurge, wart spurge (a hint to one of the plant's uses in folk medicine), or madwoman's milk, which should tell you that this is a plant you want to leave alone.

You may remember that in 2019 I wrote about another species of Euphorbia (E. x martinii 'Blackbird'), an evergreen perennial. It so happens that more than 7000 species of Euphorbia exist worldwide, ranging from tender annuals, biennials, and perennials to hardy evergreens. About 45% of Euphorbia species are succulents. To make identification even more bewildering, several species of Euphorbia found in North and South Africa have developed sharp thorns and often are mislabeled as cacti. Crown of thorns (E. millii), a Madagascar native, and poinsettia (E. pulcherrima), which hails from Mexico and Central America, are different in appearance, but both belong to the genus Euphorbia.

Euphorbia species are commonly called spurges, from the French verb *epurger*, to purge, which gives you a clear indication of another important use in folk medicine. Spurges have a long history of medicinal use in European, African, Chinese, and Indian Ayurvedic medicine. Euphorbia species have been employed in the treatment of cough, dysentery, malaria, bone and skin infections, and cancer. Besides wart removal, sun spurge has been used to treat ringworm, cholera, and intestinal parasites.

One characteristic that all Euphorbias have in common is the production of a white, milky latex sap that can cause a blistering rash on the skin and potentially cause blindness if it is splashed or rubbed into the eyes. Wear gloves and eye protection when working with any Euphorbia, and flush any areas that come into contact with sap with copious amounts of water.

Ingestion of the sap can cause drooling, pain, and swelling of the mouth and throat. Ingested sap irritates the stomach and intestines, causing abdominal pain and unpleasant distress. While Euphorbias do not possess the deadly toxicity of oleander (Nerium oleander) or water hemlock (Cicuta douglasii), it is wise to keep a close eye on young children and pets when they are near Euphorbia or any toxic plant.

As if the latex content of the stems isn't enough, parts of E. helioscopia contain minute hairlike structures that can penetrate the skin and release chemical compounds that can cause hives.

There is no antidote for contact with either the latex or the tiny hairs. Seek medical help if eyes are affected. Dilution with water may help if any part of the plant is ingested.

Some gardeners choose to plant Euphorbia helioscopia in beds or containers, the downside of which is that it almost always escapes and becomes invasive. Sun spurge is an exceptionally beautiful shade of bright green. The attractive red-stemmed plant lies prostrate along the ground, although the upper stems grow erect with finely serrated leaves arranged in groups of two or three. What appear to be flowers actually are cuplike platforms that hold tiny yellow flowers that have neither petals nor sepals. The entire flower structure is called a cyathium. The plant blooms from May through October. The fruit develops as a three-chambered capsule. The brown seeds are released explosively when ripe.

See VCE Weed Identification fact sheet "Sun Spurge" for further information on this interesting annual. I found numerous scholarly articles online related to studies of E. helioscopia for medicinal use and also for the toxic properties of the latex sap and the irritating hairs. Dr. Justis shared with me information on E. helioscopia from ACEP Now, a journal of emergency medicine.

April 6, 2023