

THEY'RE BAAAAACCCCKK...The Zombies Have Returned!

We were hiking along the Rio Grande, taking pictures of flowers and reveling in the colors that the rains had brought out of the hot, drought-damaged Chihuahuan Desert. It seemed that the ground had been painted green and there were splashes of other colors scattered everywhere. A closer look revealed why the ground looked so green: it was covered with the green forms of the resurrection fern (*Selaginella lepidophylla*), a plant known by many different names, including stone flower, dinosaur plant, and *siempre viva*. All of these names allude to the fact that it is an ancient group of plants (around even before the dinosaurs) that survives by looking dead and then coming back to life when more encouraging conditions prevail. I prefer to call them the zombies of the desert! These zombies do not spread terror through the night, they simply add to the diversity and beauty of the desert, but only after good rains! Most members of the family of the zombies are small herbaceous plants found in the tropics but during the Devonian Period of geologic history, they formed large trees.

Today they are very simple plants, these zombies, having no flowers or seeds. They reproduce with spores, just like their close relatives, the ferns that we are more familiar with. Their leaves are almost too small to see, looking more like little bracts that overlap like shingles on a roof. Growing low to the ground it has a rosette form with spreading branches that do not extend far from the center. During even the slightest dry period, these plants will curl up into a loose ball that turns brown and looks just like dead vegetation that has been blown into a small pile by the wind. For most of a year or, in many cases, much longer, they remain inert, showing no sign of life.

I had a few of these inert balls of “dead” plant in my science supply room that I would surprise students with during the years I taught biology. The last ten or so years of my career I did not teach biology but the plants remained inert in the supply room until one day one of the biology teachers asked if I knew where he could get some. I remembered them and took them to his room, hoping they still had enough life left to amaze the students. They did!

A plant with such a strong ability to survive the worst conditions was revered by the desert dwellers of long ago. The Native Americans and, today, modern man living far from pharmacies, have used the zombies of the desert as an antimicrobial to cure sore throats and colds, making an infusion from a tablespoon of the dried material in about a quart of water.



It is estimated by some that this small plant with its amazing survival strategies can live in excess of 300 years. That is amazing for a plant that under the severe conditions of the Chihuahuan Desert already looks dead and yet it can return to life when those conditions improve, just like the zombies of the movies (sort of).

Posted by Patt Sims - September 5, 2012