

## What Goes Around Comes Around

By Carol Ann McCormick, Assistant Curator, UNC Herbarium

The UNC Herbarium is fortunate to have many undergraduate volunteers and work-study students involved in all aspects of our work: mounting newly collected plants, databasing specimens for loans, and filing specimens for permanent curation. A few weeks ago, one student was amazed to discover she was mounting plants “collected all the way back in 2003!”

A few years ago, the UNC Herbarium sent the British Museum (BM) several dozen specimens of newly described species from the southeastern United States. BM reciprocated, and I recently unpacked about 150 specimens, collected by Ferdinand Rugel. My undergraduates will be happy to learn that all need mounting, and all date from 1840 to 1870!

Ferdinand Rugel (1806–1879) is a prime example of a nineteenth-century plant collector who was simultaneously a medical doctor, pharmacist, and botanist. Until the advent of chemically synthesized drugs, most medicines were derived from plants, and many doctors personally prepared medicines for their patients. Thus most physicians had an excellent working knowledge of botany. A few, like Rugel, were far more interested in botany than in their medical careers.

Rugel was born in Germany and came to the United States in 1840 on a plant collecting trip. He was persuaded to make America his home by Laura Bell of Dandridge, TN, whom he married in 1842. After the Civil War he settled in Jefferson County, TN, with Laura and their 12 children. He practiced medicine, worked as a pharmacist, and pursued his true passions—botany and plant collecting. In the bundle of specimens from BM there are plants from the Broad River, NC (*Aster undulatus*; collected October 1841), the Cumberland Mountains of Tennessee (*Stewartia pentagyna*; collected June 1842), and Spring Garden, FL (*Carphephorus corymbosa*; collected June 1848).

The specimen from BM causing the most excitement in the Herbarium has the label shown here. This is the globally rare “Rugel’s ragwort” collected by Ferdinand Rugel himself! *Rugelia nudicaulis* is classified by the N.C. Natural Heritage Program as a G3 plant species: “vulnerable globally either because very rare throughout its range, found only in a restricted range (even if abundant at some locations), or because of other factors making it vulnerable to extinction; typically, 21 to 100 occurrences or between 3,000 to 10,000 individuals.”

Rugel’s ragwort is found only in high elevation forests and openings, usually in spruce-fir forests, and in fact, all known popu-



lations are within the Great Smoky Mountains National Park. While it is globally rare, it grows in abundance, sometimes as the dominant herb, along Sweat Heifer, Deep Creek, and The Boulevard trails. As non-native insect pests kill the Fraser fir trees in the park, however, more sunlight reaches and dries the forest floor. Botanists do not yet know what effect these changes will have on Rugel’s ragwort.

As Curator Alan Weakley and I were admiring Ferdinand Rugel’s collection of Rugel’s ragwort, we noted that, with regard to its scientific name, “what goes around comes around.” Robert Shuttleworth, to whom Rugel sold many of his plant collections, named the genus in Rugel’s honor. Over the years, however, some botanists placed it in different genera—*Senecio* by Asa Gray, and *Cacalia* by Barkley & Cronquist. However, it has returned to its roots, and most botanists today agree that it deserves to be back in its own genus, *Rugelia*.

UNC Herbarium’s most recently acquired specimen of *Rugelia nudicaulis* has, in its own special way, “gone around and come around.” After a 167-year sojourn in Great Britain, it has returned home to the southeastern United States.

### ***Rugelia nudicaulis* Shuttl.**

Novum genus *Cacaliae*, *Senecioni* et *Arnicae* affine, praesertim stylo distinctum. — Capitulum multiflorum, homogamum; corollis omnibus tubulosis 5 fidis. Receptaculum nudum. Styli basi bulbosi, rami longi, apice truncati, pilis rigidis longe descendentibus obsessi. Achaenia cylindrica, glabra. Pappusaber, multisetus.

In regione superiore montium  
Smokey Ms., Tennessee  
legit RUGEL, Aug. 1842.

### Sources

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