

## A Goldenrod's Brush with Fame

By Richard LeBlond, UNC Herbarium Associate

Leavenworth's goldenrod (*Solidago leavenworthii*) looks like any other dime-a-dozen roadside goldenrod in early autumn. There is nothing about its appearance to suggest it would be suitable material for an investment by Henry Ford, intensive research by Thomas Edison, and a folk song by singer Carrie Hamby. But inspire all three it did.

A southerner, Leavenworth's goldenrod is found along the Gulf Coast from Mississippi to Florida, and northward along the Atlantic to southeastern North Carolina. It is known from fewer than five populations in our state, and is looked after by the NC Natural Heritage Program as a rare species.

Like so many of its kin, it produces a late-summer, early-autumn inflorescence composed of arching branches lined with little but brilliant yellow flower heads. Adapted to disturbances that create openings in woodlands, it has found a haven along southern roads, especially in parts of Florida.

The goldenrod was discovered by Melines Conklin Leavenworth, born in Waterbury, Connecticut, in 1796. Leavenworth graduated from the Yale School of Medicine at the age of 21, and like so many doctors of his era, was an avid botanist. For a short time after graduation, he tended the medical school's botanical garden.

Leavenworth headed south to practice medicine in 1819, settling first in Alabama and later in Georgia. He botanized extensively throughout the Gulf Coast region, finding several new species, including the goldenrod that bears his name.

Linking Ford, Edison, and Hamby to Leavenworth's goldenrod may seem a bit of a stretch, and it is, as the link is made of rubber and latex. During World War I, Edison observed that the cost of rubber was going to continue to rise after the war, and he began to look for a substitute among plants that produced latex.

Our goldenrod proved to be the biggest producer. Edison was able to grow plants composed of 12% latex, and the durable material seemed to be especially suitable for automobile tires.

The inventor convinced his good friend Henry Ford and tire mogul Harvey Firestone to invest in the project. The research was carried out in Fort Myers, Florida, and in Edison's New Jersey "Invention Factory."

Though Edison and his crew worked hard from the late 1920s into the mid 1930s, they were unable to come up with a product

that was economically feasible, and so the project was abandoned. Nonetheless, Henry Ford gave his friend a Model T with goldenrod tires, and it is reported that samples in Edison's New Jersey laboratory remain elastic and rot free to this day.

A plant that rules the roadside came that close to ruling the road. It reminds us that we have barely scratched the research surface for potential benefits from our native flora.

Tallahassee singer Carrie Hamby, a member of the folk group Singing Biscuit, chanced upon this

goldenrod's quirky history during a visit to Edison's winter home in Fort Myers, now a museum. It inspired her to write the song "Solidago," which appears on the album "Stand Up Eight." (The album title comes from a Japanese proverb: "Fall seven times, stand up eight.") She has kindly given us permission to quote her concluding stanzas.

*Now thanks to Ford and Firestone, there's mountains of old tires  
That won't return to biomass and they just keep growing higher.  
Times four for every vehicle, times two for every home,  
For now where'er we go, it seems we always go alone.*

*But could we go back to the days before a billion rubber treads,  
Would we plant our fields in Goldenrod, and watch the flowers  
bloom instead?*

*Solidago, yellow flower of little fame  
Now the ragweed gets the best of me, but you always get the  
blame.*

*Solidago, there is sunshine in your name  
They all say you're good for nothing, but I love you just the same.*

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Thomas Edison (in hat) and gardener, Mr. Hullman, viewing goldenrod plots at the Edison Botanic Research Corporation's fields in Fort Myers, Florida, ca. 1930. (Photo reprinted courtesy of Edison & Ford Winter Estates)