

A Science Service Feature

Released upon receipt
but intended for use
March 9, 1932

? WHY THE WEATHER ? Mailed March 2, 1932

By Charles Fitzhugh Talman,
Authority on Meteorology.

FROST-FLOWERS

"On cold mornings," says Willard N. Clute, "the rambler in the frosty fields may find on the dittany (*Cunila origanoides*) and a few other plants a surprising series of scrolls, ribbons and plates of ice, which spring from the stem about an inch above the surface of the soil and extend horizontally outward for six inches or more. There may be from one to half a dozen of these ice ribbons to each plant and they may attain a width of several inches and a thickness of an inch or more. Often curiously coiled and twisted, they have a considerable resemblance to a flower, and the plants that bear them are, in consequence, known as frost-flowers, frost-weeds or ice-plants."

Much has been published in recent years about these icy appendages and several scientific men have studied them, without, however, completely solving the problem of how they are formed or why they are confined to so few species of plants. They have been reported on two species of crownbeard, two species of rock rose, two species of marsh fleabane, the garden Salvia, the wood sunflower and one or more species of goldenrod, besides the dittany, which is their favorite "host."

Clute tells us that the most remarkable deposits are those found on the crownbeard (*Verbesina virginica*). He says: "This is so exuberant an ice-maker that it produces not mere curls and ribbons of ice, but masses of such dimensions that it is commonly known as the ice-plant in Texas. Within a week I have seen masses of ice on a single plant that measured 10 inches wide and 5 inches high. These, however, preserve, though obscurely, their ribbon-like structure and could be separated into many distinct layers with a knife blade."

(All rights reserved by Science Service, Inc.)

SCIENCE SERVICE
21st and Constitution Ave.
Washington, D. C.