



Desert News - 25 August 1983

Golden "dodder" weed is parasite

This article is in response to a request from one of our readers.

Frequently people's attention in the desert is drawn to an unusual sight of a yellowish to golden blotch of color against the green and neutral colors of the normal vegetation.

It is a strange unseasonable autumnal appearance that does not fit well into the summer scene.

Closer examination reveals that this curious condition is caused by yellowish stems, and in season, white to pale yellow fleshy blossoms.

These flowers are small bell-like (2- to 6-mm long) on short or absent stems (pedicels) in clusters at intervals along the twining stems, often in such abundance to affect a showy display.

The stems are profuse and their matted bundles of golden tangle over the host plant, often hiding them from view, readily identifies this plant and to the beholder can present an unusual and beautiful sight.

At times they may lightly veil an entire tree or group of clustered trees so completely as to give the appearance of glowing orange hay stacks at a very short distance. In other instances it can remind some of early Arab or Palestinian tents of Biblical days draped over poles.

Supported

These stems supported by the host plant are very thin, although they vary in size: from 25 to 250 could be laid side by side in 1 inch of space.

Single strands can attain lengths of 7 feet and under good growing conditions over a mile of stems could be produced from a single plant.

This plant, commonly called "dodder" belongs to the Convolvulus Family and is relative of the sweet potato and morning glory. Its genus is Cuscuta with about 140 species in almost all parts of the world — the United States having 30 with 16 species confined to Arizona.

It is parasitic and therefore without green chlorophyll coloring matter, and relies upon its host plant for sustenance. Although it needs to live with the host plant and not kill it, destruction can occur with over infestation.

It is the only really structurally isolated group of parasites, the peculiarity being the almost silken thread-like growth of the fine leafless yellow or orange-colored branching stems.

Begins as seed

Dodder is an annual plant which begins its life as a tiny, sticky seed (which ripens within three weeks after flowering in July-August) from the soil and can survive about eight years if weather inhibits germination.

After the seed germinates into a seedling, which looks like reddish-yellow hairs sticking out of the ground with a slight knob on top, it rapidly develops a stem which gradually moves or weaves around in as much as a 4-inch circle and must quickly find a suitable host (within four to nine days) or it will perish.

Upon finding a host plant, the stem coils to embrace it and sends out its tiny roots (hausteria) which grow into the host's tissue. Then the original first ground shoot dies.

Some dodders show a preference for a particular host, but most grow readily upon various plants.

Those which parasitize economically important crops sometimes cause considerable damage, especially clover and alfalfa.

No herbicide on the market will do a satisfactory job, as it not only kills the dodder but the host plant as well. Ammonium sulfate in solution (1½ pounds per gallon of water) kills dodder and defoliates the host.

The best method of control is to pull out infested plants and burn them. Sometimes if the plants are not too emmeshed by dodder, just the penetrated branches can be removed.

A word of caution: by walking into a patch of dodder, the sticky seeds can be carried by clothing to infect other areas. It is important to get at dodder before it drops seeds (late summer to early fall) otherwise it can be expected to invade the area the next spring, or perhaps for the next eight years.

To be safe, spray the area the next spring with a pre-emergent herbicide treatment that may be needed for several years.

Seed carriers

Such seed carriers as wind and birds are not easily controlled. A load of topsoil or flats of bedding plants may even introduce the seeds.

Dodder is also known by many other names such as golden thread, boxthorn, matrimony vine, witch's locks, strangleweed, hell-bind and love-vine. The latter named because of its clinging habit, although it is a pernicious parasitic plant firmly attached to its host by sucker-like organs.

In earlier historical days when flowers were dedicated to the Virgin by a name indicating one of her possessions, it was called "Our Lady's Laces."

Legend also has it that in one country it was a practice for a suspicious suitor to confirm the loyalty of his intended by gathering armloads of dodder and placing it off an unaffected plant. If it did not take root, he could allay his fears.

"while everywhere

The love-vine spreads a
silken snare,
The tangles of her yellow
hair."