

Q: What is legume?

A: Plants called legumes are members of the Fabaceae or Bean and Pea family of plants. This is currently believed to be one of the largest plant families, and a very important one to people. Included in this family are annuals, perennial herbs, shrubs, vines and trees. Over 19,000 species can be found from the arctic to desert regions and everywhere in between. One of the adaptations legumes have evolved is a symbiotic relationship with nitrogen fixing bacteria (rhizobia) that live on their roots, enabling the plants to grow in areas where soil nitrogen might not be available. By the time of the Roman Empire, legumes were being grown to improve soils as they are today.

Q: I have a fennel plant that is being smothered with yellow thready stuff that looks kind of like silly string. How do I get rid of it?

A: You are describing Dodder, a parasitic annual plant that infects many different kinds of plants. There are over 150 species of Dodder, *Cuscuta* spp., found all around the world, and all of them are plant parasites. There are at least eight species of Dodder native to our region, however a new form from Japan has been found in the county, and it has a much larger host range. Dodder is spread by people when soil is moved, including soil on shoes, tools and tires. Each plant can produce thousands of seeds, only about 5% of which will germinate in a year. The seeds have a hard thick coat that enables them to survive summer heat. The thread-like wiry stems emerge from one of the germinating seeds in the spring, and rapidly twine themselves around a host plant. There are no visible roots or leaves. The stems live on resources stored in the cotyledons (seed leaves) until it has penetrated the tissue of the host plant and has access to the nutrients and water stored within. Dodders have limited photosynthesis ability, as all the resources they need are taken from the host plant. As dodder plants grow, they continually reattach to the host. When other suitable hosts are nearby, dodder shoots spread from host plant to host plant often forming a dense mat.

You want to remove all plants showing any sign of dodder infestation. It is not currently recommended to compost the dodder infested host, even if you have a hot compost pile. Double bag the pulled plants in plastic, and leave in the full sun for up to a week to kill any forming seeds. Check your garden regularly, pruning off any sign of infested plant material. The following is a chart of host plants susceptible to the native dodder species. The new Japanese Dodder can use most broad-leafed plants as hosts.

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Table 1. Some Common Ornamental and Vegetable Plants Susceptible to  
Dodder Infestation.

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<b>Vegetables</b>	<b>Ornamentals</b>
asparagus	chrysanthemum
beet	English ivy
carrot	fennel
eggplant	impatiens
garlic	marjoram
melons	mint
onion	morning glory
pepper	periwinkle
potato	petunia
sweet potato	summer savory
tomato	

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