

Alfalfa Stem Nematodes found in Fresno County

Alfalfa stem nematodes (*Ditylenchus dipsaci*) are not your usual kind of nematode. They spend hardly any time in soil. Their entire life cycle can be spent in the crown and foliage of alfalfa. (Other stem nematodes can infect other hosts). For the past few years this nematode has been an increasing problem for alfalfa growers in the Sacramento and northern San Joaquin Valleys. Last week stem nematodes were found in an alfalfa field in Fresno County. It is possible they are here in Tulare County.

The nematode is active under cool, wet conditions and that is when damage is noticeable. It feeds on stems and leaves. Symptoms include swollen stems and small leaves. Plants will look stunted compared to non-infected plants. Areas in a field are usually affected, giving a patchy appearance to the stand. These symptoms can resemble damage from the blue alfalfa and the cowpea aphid. Yields of affected cuttings can be significantly decreased.

Optimum temperatures for invasion and reproduction are from 59-68 F. They need a film of water to move around on a plant and from plant to plant. With our climate here in Tulare County one would expect to see damage only during winter or perhaps the first cutting. Once temperatures increase and it is drier, the 4th stage larva can become resistant to desiccation and serve as the survival stage.



Swollen stems (left) and deformed leaves (right) of alfalfa stem nematode infected alfalfa.