



Is *Aphanomyces* Root Rot Holding Your Alfalfa Yields Back?

Aphanomyces Root Rot was recently identified in New York alfalfa fields that were tested this spring, leading many of us to wonder how prevalent this disease is in our alfalfa fields. How did your spring seedings look this year? How about spring growth of your fall seedings? Many field calls were made to look at seedings after wet spring conditions caused problems in n, tstands. In addition, 2011 summer seedings, which looked good going into winter, were slow growing and lacked vigor this spring. The manner of how symptoms presented in new seedings (spotty, unpatterned distribution of symptoms, chlorotic cotyledons and rotted roots) and slow growth of previous year's seedings led ACS crop consultants to suspect *Aphanomyces* Root Rot (ARR). This disease has not been discussed much previously in New York, so soils were tested for a definitive diagnosis. *Aphanomyces euteiches* was found to be present in 4 of the 5 fields tested.

Aphanomyces root rot is an important alfalfa disease impacting seedings, spring growth of older stands, regrowth after cuttings, stand longevity and yield. ARR is caused by a fungal pathogen *Aphanomyces euteiches*. ARR does not just impact new seedings however that is the place it is most noticeable. In established stands, *Aphanomyces* reduces root growth and nodulation. Infected mature plants are slow growing in the spring after breaking winter dormancy and rebound slowly after harvests (Grau 1990).



Multiple races of ARR exist, two receiving the most attention right now: Race 1 and Race 2. Many alfalfa varieties have resistant (R) or highly resistant (HR) ratings to ARR Race 1. A few, but growing number of alfalfa varieties are documenting resistance to Race 2. *Aphanomyces euteiches* Race 1 AND Race 2 were both found to be present in soils from a limited number of locations in Central New York.

ACS is spearheading a statewide survey to map distributions of ARR Race 1 and Race 2 in soils across New York. To find out more information about this important alfalfa disease and to get your soils tested contact your local ACS crop consultant.

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