

Current seed production (1992 crop) grown within the one mile boundary of a known rhizomania infected field should not be used for seed. This dirt brought in with bean crops from fields within the one mile boundary should be kept separate.

The Idaho Crop Improvement Association, the agency responsible for seed certification, has changed their certification standards to include the following:

Leafy matter (dirt and rocks) shall be reduced from the current 0.2% down to 0.1% in all bean seed. Bean seed may not be entered for certification on known rhizomania infected fields.

PILGERAM, ALICE L.\*, AND JAMES E. DUFFUS USDA-ARS, 1636 E. Alisal St., Salinas, CA 93905. - Characterization of single cystosori isolates of *Polymyxa betae*.

*Polymyxa betae*, a ubiquitous soil fungus, is the vector of beet necrotic yellow vein virus. The genetic diversity of *Polymyxa* is being studied using RAPD analysis (Random Amplification of Polymorphic DNA). DNA is isolated from *Polymyxa* zoospores, individual cystosori, or infected root tissue and amplified with a Perkin-Elmer thermocycler using standard cycling parameters (94 C, 2 minutes: 35 C, 1 minute: 72 C, 1 minute). In preliminary studies, both similarities and differences in DNA banding patterns have been observed from *Polymyxa* populations from several western states as well as from individual cystosori isolated from a single infected beet root. Analysis of the genetic variation between species of *Polymyxa* and between aviruliferous and viruliferous isolates of *Polymyxa betae* is in progress.

Observations and data strongly support the hypothesis that the disease has been in Idaho for at least several years. If so, then our climate is probably cool enough that we will only experience significant expression of the disease in some years. Reduced disease pressure may allow us to better manage rhizomania than can be accomplished in areas where the climate is warmer and severe losses will occur whenever it is present.

The Rhizomania Committee continues to meet as necessary to meet the challenge of dealing with the disease. One favorable result of the problem is that it has focused attention on the concept that agriculture is a dynamic industry, and no matter how unrelated various aspects may seem, we are interconnected. Other Idaho agricultural industries recognize that maintaining a viable sugarbeet industry is in the best interest of all Idaho agriculture.