FISHER, G.A., and J.S. GURIK, Holly Sugar Co., Plan. Pathology Leboratory, Trace CA 95378 (<u>A PCR-Based Method for Differentiation of Rhizoctonia solari</u>) Analogicals Graups.

## VAUGHN, K.M., AND C.M. RUSH, Texas Agricultural Experiment Station, Bushland, TX 79012. - <u>Preliminary studies on the presence of three sugar beet seedling pathogens</u> from major production areas in the USA.

Three major soil-borne pathogens which cause sugar beet seedling diseases are Aphanomyces. Rhizoctonia, and Pythium. Presently in the United States, there are no label fungicides for Aphanomyces, but fungicides for control of Rhizoctonia and Pythium are available. Tachigaren is a systemic fungicide that is effective against Aphanomyces spp., Pythium spp., and some strains of Rhizoctonia spp. This fungicide is developed by Sankyo of Tokyo, Japan, and is labeled for use in most countries in Europe, but not in the USA. We are interested in getting EPA clearance for Tachigaren in the USA. As part of this effort, we are trying to determine the geographical distribution of Aphanomyces and other major sugar beet seedling pathogens throughout the major growing areas in the USA. This information will be used in trying to secure a label for Tachigaren. So far, soil samples from Idaho (Nyssa and Nampa factory districts), the Red River Valley (Moorehead & Minn-Dak factory district), and Colorado (Ft. Morgan & Greeley factory district) have been screened. Rhizoctonia was predominantly isolated from Idaho and Colorado. Low levels of Aphanomyces were also found in Colorado. Soil samples from the Red River Valley showed high levels of Aphanomyces, with some Rhizoctonia it region using primars 11 isolated.

approximately 750 bp. Fworthy five cycles was found to be adequate . When the PCM products were ligeated with restriction endoautlenses , the Restriction Fragment Length Polymorphians (RFLP) generated showed clear differences between isolates of different AGE. So for each tector of the bree participant AGE is and four of these produced unique RFLPs for at least one of the bree partegoric AGs. Alle 1 and Mbo I produced unique stFLPs for at least one of the bree partegoric AGs. Alle 1 and Mbo I produced unique stFLPs for AG A. Has III and Hpa II violed RFI Ps and four of best produced unique stFLPs for AG A. Has III and Hpa II violed RFI Ps and perturbation to AG 2-2. Several other for an participant and the tree produced in the strengenic AGs and perturbation of best produced to be the strengenic AGS and the tree produced to be the produced in one PGR to run strengenic AGs with a single digest, but since enough DNA can be produced in one PGR to run strengenic AGs with the traditional microtropy for the strengenic AGS and the traditional microtropy of the strengenic AGS and the traditional microtropy of the strengenic AGS and the strengenic AGS and the strengenic AGS with the traditional microtropy for the strengenic AGS and strengenic AGS and the strengenic AGS and th