**REPORT TO THE AGRICULTURAL RESEARCH FOUNDATION**
**For The Oregon Processed Vegetable Commission**
**December 18, 1998**

**Title:** **Pesticide Evaluation and Education, Magnitude of Residue Field Trial Pendimethalin/Broccoli and Cauliflower**

**Project Leader:** **Robert B. McReynolds, Coordinator, IR-4 Field Research Center, North Willamette Research & Extension Center**

**Project Funding**: The funds provided by the Commission were used to purchase supplies and to pay for services required for conducting the trial.

**Objective:** The objective of the trial was to collect samples of broccoli grown in plots to which pendimethalin had been applied. The samples were to be analyzed in order to establish the level of the herbicide remaining at harvest in comparison to unsprayed broccoli plants. The results were to be included in a petition to EPA requesting a tolerance for pendimethalin residues in all head-forming brassicas.

**Project Status:** One trial was established at North Willamette Research and Extension Center in Aurora with the transplanting of the broccoli variety Excelsior on 27 May 1998. Pendimethalin was applied over the top of the plants 3 days later at a rate of 1.0 lb ai/acre. The trial design was large blocks, one untreated and one treated, with buffers on all sides of both plots. Plant samples were harvested from both blocks on 27 July 1998 and were immediately frozen. On 4 August they were shipped to U.C. Davis for residue analysis. The field data notebook was sent to IR-4 Headquarters on 22 October 1998. Information from the residue analysis and the field trial activities will be included in a petition request to EPA that will be completed in early 1999.

**Summary:** The completion of the magnitude of residue field trial and the analysis of the residues by the laboratory represent the final steps in securing a tolerance for this product in head forming brassicas. EPA will review the results of the laboratory analysis and also the procedures used to conduct the field trial from which the samples were obtained. If they determine that the residue level poses no undue risk and conclude that the trial was conducted in such a way as to be 're-constructable and that the results are verifiable' it is very likely that they will approve the request for the tolerance. Because, this trial was conducted under GLP guidelines and was audited by a Quality Assurance Officer from IR-4 during its progress, I am confident that it will meet both criteria, and would not be a cause for EPA to deny the request.

It is difficult to estimate how long it will take EPA to decide on this request once it is submitted. But, the time line will likely be impacted by the effort of EPA to implement the provisions of the Food Quality Protection Act.