RESEARCH PROPOSAL FOR 1986

M. D. Harrison and G. D. Franc

- 1. Continued studies on the effect of the use of <u>Erwinia</u>-contaminated irrigation water on current season losses and recontamination of seed tubers.
- 2. Long distance transport of <u>Erwinia</u> cells with storm systems and their deposition in <u>surface</u> water will be continued and hopefully completed by the end of the year. Studies on the replication of <u>Erwinia</u> in water will be continued.
- 3. The relationship between inoculum concentration and ringrot symptom expression will be studied for one more year.
- 4. The possibility of ringrot bacteria being present in stem cuttings or microplants without producing symptoms will be studied.
- 5. The ability of stem cutting/micro-propagation programs to eliminate ringrot bacteria from known infected tubers will be investigated.
- 6. Studies will be initiated on the possibility of other sources of ringrot bacteria other than infected tubers and contaminated equipment and storage.
- 7. Studies of factors other than inoculum levels affecting ringret expression will be initiated.

BUDGET REQUEST

Plot Maintenance	\$ 300.00
Labor	2600.00
Travel	1700.00
Supplies and Equipment	2000.00
Total	\$6600.00