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Research Proposal and Budget Request

submitted to

Area II Potato Administrative Committee

from

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Post Harvest Studies

1. Continue to evaluate promising clones in as many parameters as considered necessary including culinary testing in cooperation with Dr. Joe Maga, Department of Food Science and Nutrition.
2. In the last two years, Centennial has shown a considerable increase in soft rot susceptibility. Possibly this was due to a change in the strain of *Erwinia atroseptica* used for assaying. Several strains of the organism will be evaluated for rotting potential on Centennial in air and CO₂ enriched atmospheres.
3. In all prior evaluations, only one clone, BC9289-1 has been consistently blackspot resistant and also shown a slow browning rate of frozen and thawed tissue slices. A large number of seedling clones will be screened for the latter characteristics. If some are found these will be further studied for blackspot susceptibility and biochemical relationships. Inheritance studies could also be done.
4. Continue research on chemical control of blackspot on Russet Burbank. Substances will be screened for their effectiveness to prevent browning of frozen slices of Russet Burbank. Those with the greatest potential will be tested with carriers on intact tubers.

Budget

Labor; laboratory, statistical, etc.	\$3,000
Supplies, etc.	400
Equipment	600
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	\$4,000