Agricultural Experiment Station News May 1970
ON BEING RELEVANT. This issue of relevance figures in contemporary discussions on University campuses concerning various programs carried on by these institutions. Usually the issue is related to teaching, but questions occasionally are raised about research also.

By definition the research work of a State Agricultural Experiment Station is presumed to be relevant; we are mission oriented, and our programs are addressed to the solution of real life problems. However, we cannot smugly rest on our charter as proof that in fact all our research is always relevant. In fact, we are not allowed this luxury. New problems are continually being defined and enunciated by farmers, homemakers, politicians, and other clientele groups. This fact, coupled with rapidly changing technology, changing social and economic conditions, changing social criteria puts us under a continuing obligation to test our work for relevance, for its present or potential contribution to the solution of felt problems.

We were pleased last week to have an inquiry from some students about research work in the Station, and specifically concerning our activities with respect to pollution from agricultural sources. The questions raised by the students were appropriate; however, they obviously were not adequately informed about what we were doing. As a matter of fact, our activities with respect to agricultural pollution problems date back several years; we have had growth of activity in this area, importantly but not only due to Federal help, to the point that we now have over 20 different Federal and State scientists spending the equivalent of more than 11 SMYs of time on various kinds of pollution research. Pollution from feedlots is the single most important emphasis; however, work is underway on pollution from poultry sources, and from fertilizers and herbicides.

We can all be pleased that we can cite an example of relevant research in the Station; in fact, I doubt that many of us realized three or four years ago when our pollution research was developing just how relevant these efforts were to prove!

H. W. Ottoson

MULTIDISCIPLINE RESEARCH

It is increasingly important that new technology be packaged integrally and compatibly into a broader operative system if it is to be applicable to a modern agricultural enterprise. This is true regardless of the type of enterprise; supply, service, production, processing or marketing. It is not reasonable to assume that the entrepreneur can formulate the complex system from separate and specific components of research. Furthermore, it cannot always be assumed that such specific components are compatible for systemization unless they are caused to be so by the appropriate multiple scientific inputs to a cooperative research effort.

Certainly, some research activities and the technical output from them are directly and specifically applicable to defined problems within operative systems without impact on other segments. Other research results may be compatibly incorporated into operational systems with adjustments by technically trained extension people; commercial people, service representatives, etc.

(over)
Increasingly, however, because of the complexity of systems and the interrelations of their components, meaningful research should involve the design and testing of whole systems. For example, row spacing in row crops interrelates with variety characteristics, irrigation practice, fertilization program, weed control, harvesting equipment and perhaps even with storage and handling requirements. Failure to adequately resolve any one of these can make work in the other segment quite academic because the system is not functional.

At the same time, with increasing technical sophistication, scientists, to be effective, must preserve and increase their specialization. These two requirements for effective research are incompatible when faced by an individual scientist. Thus, the need and benefit to all of multi-disciplined research projects. The agricultural industry gets "system proven" technology usable with a minimum of adaptive experimentation. The scientist is permitted specialized focus and competence and the satisfaction of having his results incorporated and applied to operative system improvement.

Sure, it is simpler and easier to go it alone. It takes meetings, planning, meetings, cooperation, meetings, compromise, meetings, joint authorship and more meetings to work as a team. But, our purpose is productive research and for this, cooperation is worth the effort.

PERSONNEL ACTIONS
Trotter, Virginia - from Dir., School of Home Ec. to Dean, College of Home Ec. - July 1
Anthony, Hazel - Associate Dean, College of Home Economics - July 1
Dickason, E. A. - Chairman, Department of Entomology (from Oregon State U.) - July 1
Gingles, Ruby - from Associate Director, School of Home Ec., to Professor HD&F - July 1
Hansen, G. D. - Chairman, Family Economics and Management - Graduate Staff
Hibbs, C. M. - Veterinary Science (North Platte) - Graduate Staff
Schluckebier, Mary - Home Economics, Northeast Station - Resignation

GRANTS AND CONTRACTS
Bagley, W. T. - Horticulture and Forestry - USDA CSRS $17,375.00
Burnside, O. C. - Agronomy - Dow Chemical Company 500.00
Crowe, C. A. - Agricultural Education - State Dept. of Educ. 5,000.00
Fenster, C. R. - Agronomy (Scotts Bluff Station) - Dow Chemical Company 1,200.00
Fenster, C. R. - Agronomy (Scotts Bluff Station) - W. R. Fawcett Farm 6,000.00
Ferguson, D. L. - Veterinary Science - NSF 28,000.00
Hagen, A. F. - Entomology (Scotts Bluff Station) - Union Carbide 11,560.00
Knoche, H. W. and Olson, R. A. - Biochem. and Nutr. - U.S. Atomic Energy 11,560.00
Lucas, L. E. - Animal Science - Nebraska Pork Producers Association 3,500.00
Munson, J. D. - Entomology - Union Carbide 970.00
Munson, J. D. - Entomology - Hercules Powder Company 500.00
Munson, J. D. - Entomology - Mobil Chemical Company 750.00
Munson, J. D. - Entomology - Ortho Division - Chevron 1,500.00
Munson, J. D. - Entomology - Shell Development Company 500.00
Munson, J. D. - Entomology - Stauffer Chemical Company 500.00
Sullivan, T. W. - Poultry Science - Hoffman LaRoche Inc. 5,000.00
Wicks, G. A. - Agronomy (North Platte Station) - BASF Corporation 500.00
Wicks, G. A. - Agronomy (North Platte Station) - Dow Chemical Company 1,800.00
Wicks, G. A. - Agronomy (North Platte Station) - FMC Corporation 500.00

GENERAL NOTES
1. Tractor Power and Safety Day is July 30 rather than a week earlier as reported in the last newsletter. I missed a turn of the planning group somewhere - sorry.
2. The recent hail storm severely damaged crops research plots at the Havelock farm, particularly the wheat nursery.
3. Supplies needed for yesterday's experiment must be ordered no later than tomorrow.

R. W. Kleis


2886. Unstable Breeding Behavior of Fruit Shape in the F1 of Butternut x Crookneck Squash Crosses and Implications in Hybridization. Dermot P. Coyne. HortScience.


a = abstract

BULLETINS PRINTED


RB 238 An Annotated List of Grasshoppers (Orthoptera, Acrididae) From the Eleven Panhandle Counties of Nebraska. A. F. Hagen.