

## Soil chemist receives award

NEWARK, Del. — Donald L. Sparks, soil chemist at the University of Delaware, is one of only two American scientists recently honored by a jury of the International Potash Institute in Berne, Switzerland, which meets every four years to evaluate reports on major potassium research around the world.

Last year, in its search for creative new potassium studies, the jury examined 111 papers by 70 authors on topics ranging from plant nutrition to human health. After assessing this volume of

work for its significance, the institute sent congratulations to Sparks and six other scientists, one from the United States and five from abroad.

The congratulatory letter he received this summer cited papers published by Sparks and former graduate student, Philip Jardine. While Jardine was earning his master's degree, the two men collaborated on a study aimed at explaining the role of clay, organic matter and other soil components in potassium retention. Because potassium leaches readily and is

essential to plant growth, their research could significantly affect future fertilizer management practices, particularly in regions like the Delmarva peninsula with sandy coastal plain soils.

Sparks joined the Agricultural Experiment Station of the university's College of Agricultural Sciences five years ago after receiving his doctorate in soil chemistry. Since then, in addition to teaching and conducting laboratory and field research, he has written a textbook on soil physical chemistry for use

by graduate students and professionals. He has also been invited to write chapters on soil chemistry for three other books, including the next issue of *Advances in Agronomy*, published under the auspices of the American Society of Agronomy.

His research specialty is potassium kinetics, or the mechanism by which potassium bonds with and is released from soil particles. Very little research has been done on this subject in the world, and only two or three other American scientists are studying the behavior of potassium in soils.

Under Sparks' leadership, the University of Delaware has developed a very active field program to complement his laboratory research. At present, he and his colleagues are investigating the effects of split applications of potassium on irrigated high management field corn. As part of this work they are gathering information on the

critical potassium levels needed in plant tissue at different growth stages for maximum yield.

Because of his expertise, Sparks is much sought after as a visiting scholar and speaker. During the 1983-84 academic year he spoke at the University of Kentucky, Rutgers University, the University of Maryland, Ohio State University and the University of Saskatchewan (Canada). This summer he presented a guest paper at an international clay minerals symposium in Alberta, Canada. He has also been invited to address an international potassium symposium in Atlanta, Georgia, next summer.

Jardine is currently working on a Ph. D. in soil chemistry at Virginia Polytechnic Institute and State University. He earned an undergraduate degree with distinction and took his master's degree in soil chemistry at the University of Delaware, where Sparks was his advisor.

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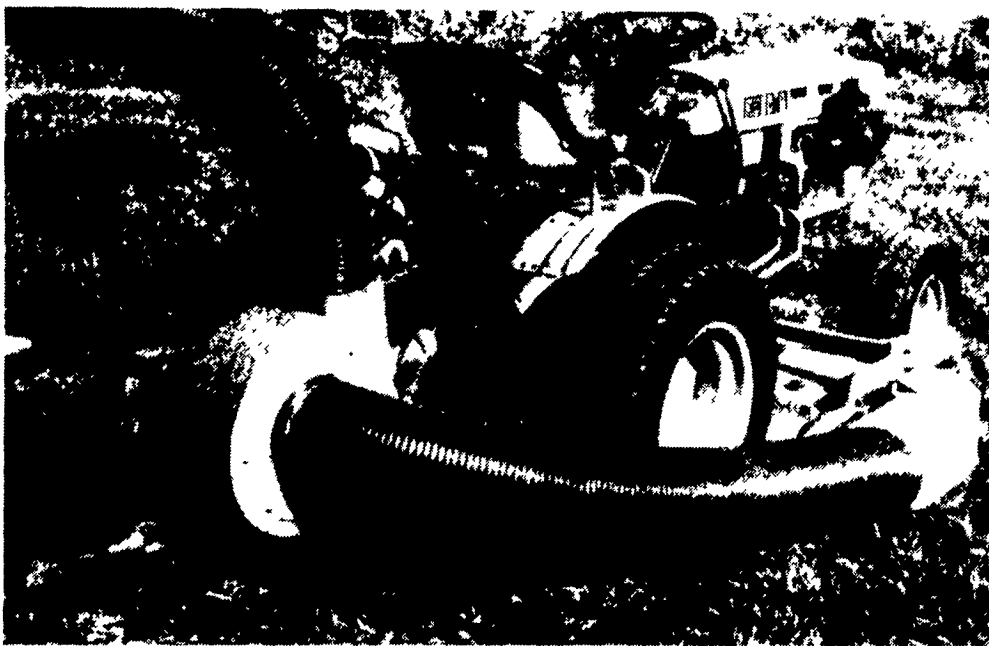
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## Co-op month set to open

HARRISBURG — October is Cooperative Month, and to kick-off festivities the Pennsylvania Association of Farmer Cooperatives (PAFC) has scheduled a luncheon and public affairs symposium on Monday at

the Holiday Inn, Center city, Harrisburg, according to Ward Cooper, president.

Registration for the noon luncheon begins at 11:00 a.m. The symposium is set to begin at 2:30 p.m.

Featured speakers at the symposium include Gene Swackhamer, president, Baltimore Farm Credit System; Wayne Boutwell, chief executive officer, National Council of Farmer Cooperatives; and Rep. Dave Wright, D-Clarion.

In addition, the PAFC annual meeting will follow the symposium. The annual banquet begins at 6:30 p.m., followed by entertainment featuring Jennifer Eshelman, former Miss Pennsylvania. The business session follows breakfast on Tuesday morning.

October Cooperative Month was formed to educate consumers about the purposes and economic contributions of cooperatives. In Pennsylvania, cooperatives are among the leading business enterprises with more than 1 million member-owners providing low-cost, high-quality goods and services for the commonwealth's 12 million citizens.

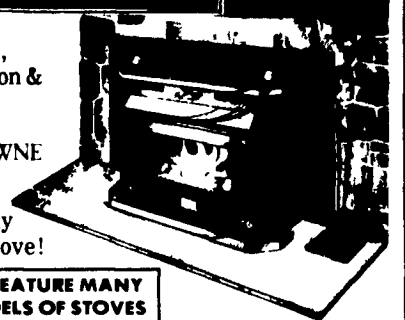
One in four Americans belongs to a cooperative, from credit unions to housing or electric cooperatives. In Pennsylvania, more than 100 farmer cooperatives provide \$1 billion in goods and services to more than 72,500 farmer cooperative members. Also, 13 rural electric cooperatives distribute electricity to 600,000 rural Pennsylvanians

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