**Built-in Plant Protection**

**Issue (who cares and why?)**

Each year plant diseases cost U.S. agriculture more than $10 billion in crop losses. Environmentally friendly yet cost-effective methods for disease control will reduce loss, thus helping American farmers remain profitable in the highly competitive global market.

**What has been done?**

Taking advantage of the natural disease resistance in plants is a promising avenue for research, but first scientist must better understand the biochemical basis of plant disease resistance. Using bacterial pathogens of *Arabidopsis* as a model system because of its unparalleled availability of genetic and genomic resources, we expect that what is learned will be useful for engineering crop plants.

**Impact**

Crop plants engineered to resist disease will mean tens of millions of dollars saved each year in crop production in the United States.

**Primary impact area**

Research and Education

**Funding sources**

USDA NRICGP and DuPont Corporation.

**Contact:**

Allan D. Shapiro
Assistant Professor
University of Delaware
Plant and Soil Sciences
Delaware Biotechnology Institute
15 Innovation Way
Newark, DE 19711
Phone: (302) 831-4889
Fax: (302) 831-3409

ashapiro@udel.edu