

**SPRAYED TO DEATH:
ON THE LOCK-IN OF AN INFERIOR PEST CONTROL STRATEGY**

by
Robin Cowan
New York University
November 1990.

For thirty years we have been aware of the negative effects of extensive chemical pesticide use for the control of agricultural pests. In that time, though, there has been little shift away from pesticide use. This paper uses results from the competing technologies literature to examine why this is the case. In a competition among technologies that all perform a similar function, the presence of increasing returns to adoption can force all but one technology from the market. Furthermore, the victor need not be the superior technology. This paper argues that these theoretical results are important in understanding the relative degrees of adoption of chemical control and its main competitor, Integrated Pest Management, by farmers controlling agricultural pests.

This research was supported by a grant from the C.V. Starr Center for Applied Economics at New York University. The author thanks Yvonne Manu for excellent research assistance.