

The Business of Breeding: Hybrid Corn in Illinois, 1890–1940. By Deborah Fitzgerald. (Ithaca N. Y.: Cornell University Press, 1990. Pp. xi, 247. Notes, illustrations, bibliography, index. \$29.95.)

Deborah Fitzgerald has chosen to study the development of hybrid corn in order to examine the processes by which pure science becomes applied science and to explore the differing roles of the land-grant colleges and private industry in that process. She has consulted the relevant secondary materials and has utilized substantial collections of primary sources at the University of Illinois, in the National Archives, and in the possession of Funk Brothers, one of the country's leading producers of hybrid seed corn.

Fitzgerald's readers will learn something of the traditional and scientific means of increasing corn yields through the use of improved seed, the role of the United States Bureau of Plant Industry in corn breeding, and the policies of Eugene Davenport, the prominent dean of the Illinois College of Agriculture and director of the Illinois Agricultural Experiment Station as he built those agencies during the first decades of the twentieth century. Readers will also become acquainted with the corn improvement activities of the University of Illinois, especially the sometimes contradictory programs of the Department of Agronomy and the Cooperative Extension Service, with the investigative and promotional work of Funk Brothers, and with the impact of the widespread adoption of hybrid seed by farmers on the relationships between the university and the private firms that produced and marketed most of the seed.

This sometimes discursive book supplements very well the earlier work of Helen M. Cavenagh, Richard G. Moores, and others. The volume will be of greater interest to historians of science than to historians of agriculture. Fitzgerald is concerned mainly with the process of scientific innovation, with the changing relationships among the agencies engaged in that process, and with the shifting perceptions of those agencies. These are not unimportant matters, but agricultural historians will wish that in addition the author had examined farmers' decisions to abandon open-pollinated varieties of corn, the relationships between the utilization of hybrid seed and the adoption of such other new technology as the mechanical corn picker, and the impact of the almost universal use of the higher yielding varieties by 1940 on the demographics and other characteristics of the rural Middle West.

ROY V. SCOTT, professor of history, Mississippi State University, is the author of *Eugene Beverly Ferris and Agricultural Science in the Lower South* (1991). He is currently working on a history of Wal-Mart Stores, Inc., and a study of farming and farm life in the Middle West since 1900.