Production of Hybrid Seed Corn

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The objective of this chapter is to present a current, state-of-the-art description of seed corn (Zea mays L.) production as it is commercially practiced in the late 1980s. The chapter draws heavily on the treatment by Craig (1977), but will highlight changes in the industry and in technology since that chapter was written.

9–1 HISTORICAL PERSPECTIVE

The first commercial hybrids were produced and sold in the early 1920s. From that modest beginning our present-day sophisticated hybrid seed corn industry has developed. Crabb (1947) described the first production of hybrid seed corn in Iowa:

“The first contract ever drawn for the production of seed for hybrid corn gave [George] Kurtzweil the exclusive right for all time to produce the Copper Cross hybrid, a contract which, although it hasn’t been exercised for a good many years, is still one of Kurtzweil’s most prized possessions.”

“[Henry A.] Wallace said he had foundation inbred material to plant a one-acre seed plot, and the decision was made to produce the first commercial hybrid seed corn ever grown in Iowa . . . Wallace turned the seed over to Kurtzweil [in 1923]. The old East Learning inbred was used for the seed parent, and the meager supply of the Bloody Butcher line was used as the pollinator parent. Only by very sparse and careful planting was Kurtzweil able to plant the plot that measured almost one acre on a small farm owned by Kurtzweil’s father, Mathias Kurtzweil, at Altoona, just east of Des Moines . . .”

“The first detasseling of commercial hybrid seed corn in Iowa was done entirely by a woman, Ruth Kurtzweil, a sister of George . . . From the time the first tassels of the parent plants began to appear on the Learning inbred, Miss Kurtzweil went up and down, pulling them out. Few fields of hybrid seed corn since have been detasseled with such care and interest. Now that producing hybrid seed corn has become such a tremendous enterprise, Miss Kurtzweil delights in calling her friends’ attention to the fact that she once detasseled all the hybrid seed corn production fields in the State of Iowa.”

“Copper Cross earned another distinction in 1924 when it became the first hybrid developed in the corn belt to be purchased by farmers of Iowa and elsewhere. Approximately fifteen bushels—all that was available of Cop-