3 The Contribution of Introduced Germplasm to the Development of U.S. Wheat Cultivars

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All wheat (*Triticum aestivum* L. and *T. turgidum* L. var *durum*) cultivars grown in the USA are descended from introduced germplasm. The ancestors of today’s wheat cultivars were introduced to the USA in two overlapping phases. From the time of the earliest colonists to the early twentieth century, wheat cultivars were brought into the USA, primarily from the European continent, for use in agricultural production. In the second phase, which spans most of the twentieth century, wheat germplasm has been introduced for use in breeding programs.

THE FOUNDATION GERMPLASM

Foundation germplasm (Table 1) is defined herein as the introduced wheat cultivars widely grown by U.S. farmers from the seventeenth through the early twentieth century. Most of these cultivars also made significant contributions as parents of cultivars through direct selection or hybridization.

The precise origins of most of the early soft red and white winter wheat cultivars introduced and grown in the eastern USA are unknown. From the multitude of seed lots brought to this continent by colonists and other immigrants, a handful of cultivars became widely grown (Table 1). Among the soft red winter wheats, ‘Mediterranean’, ‘Purplestraw’, ‘Flint’, and ‘Michigan Amber’ were to become predominant parents in later breeding programs, with Mediterranean contributing by far the most germplasm (Murphy et al., 1986). ‘Goldcoin’, a white wheat known also as ‘Fortyfold’, was an important ancestor of both soft red winter and eastern white winter wheat cultivars.