The cultivated sunflower (Helianthus annuus L.) ranks with soybean [Glycine max (L.) Merr.], rapeseed (Brassica rapa L., and B. napus L.), and peanut (groundnut) (Arachis hypogaea L.) as one of the four most important annual crops in the world grown for edible oil. It has been the main source of edible vegetable oil in Russia and other eastern European countries for decades. The oilseed cultivars of today, which consistently contain more than 400 g/kg oil, offer attractive raw material to vegetable oil processors. Food manufacturing industries readily accept the high-quality oil.

Significant amounts of sunflower seed are consumed in other markets than oil markets. Some large seed is used as whole, roasted seed, much like peanut. Some seed is dehulled and the kernels are sold as confectionery “nuts.” Smaller, whole seed is used in the rations for pet birds and small animals, as well as in home feeders for wild birds.

This chapter examines the origins of the cultivated sunflower in North America, the early history of the plant, and its introduction, distribution, and adoption as a commercial agricultural crop in Europe. The chapter also describes the return of the sunflower to North America and its spread throughout other parts of the world.

SUNFLOWER AMONG NORTH AMERICAN INDIANS

Early Evidence

Archaeological evidence reveals the use of sunflower among American Indians (Heiser, 1955). At least one reference indicates cultivation of sunflower began in Arizona and New Mexico about 3000 B.C. (Semelczi-Kovacs, 1975). The geographical range widened, the crop reaching from Arkansas to the Dakotas and eastward to Ontario, Canada, and Pennsylvania. Much of the evidence indicates that a type of monocephalic, domesticated sunflower existed in the prehistoric North American Indian culture and Whiting (1939) credits V.N. Jones with the opinion that sunflower may have been domesticated before corn (Zea mays L.). Lees (1965) states that archaeologists, using carbon-14 dating, have established evidence of sunflower in the Mississippi-Missouri Basin 2800 yr ago.