Nonoilseed sunflower, (Helianthus annuus L.) is grown in gardens of many countries of the world to be consumed as a raw or roasted and salted snack. Large quantities of seeds also are used for feeding birds and small animal pets in the USA and Canada. Field production of nonoilseed sunflower in North America is concentrated in North Dakota and Minnesota. Lesser quantities are grown in other areas, primarily the states of South Dakota, California, and Texas, and the Canadian provinces of Manitoba, Saskatchewan, and Alberta.

Seed used as a confection or for snack food is typically of large size, i.e., those seeds passing over a 7.9 mm (20/64 in) round-hole sieve. The outer layer of the hull is striped black and white. A dark inner layer, characteristic of many genotypes, may give a grey appearance to the white stripes of the outer layer (20). Nonoilseed sunflower hybridizes readily with oilseed and wild H. annuus, thus requiring space or seasonal isolation to prevent cross pollination when seed is grown for planting purposes.

This chapter will discuss the processing, quality determination, preservation, and uses of nonoilseed sunflower.

**PROCESSING PROCEDURES**

Country elevators and processing plants purchase nonoilseed sunflower from the farmer according to the Grading Standards found in Chapter 12. Processing plants usually remove “dockage” as the first step in cleaning the seed. Dockage consists of petiole and stalk pieces, portions of the head, cracked hulls, and other foreign material. Seeds generally are separated into three groups based on size. The large size, which is often that seed going over a 8.7 mm (22/64 in) round-hole sieve, is used as “in shell” product. This seed is salted and roasted whole and usually constitutes 15 to