Fertilizer Use on Grain Sorghum

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Grain sorghum acreage in the USA has varied during the past decade because of federal crop production programs. Production per acre, however, has generally increased due primarily to increased fertilizer use, sorghum hybrids, and other improved management practices.

The acreage and average yield of grain sorghum in the USA is reported in Table 1. The average production in the USA is now more than 650 million bushels annually. The world acreage is estimated at close to 80 million acres. As a grain crop in the USA, sorghum is exceeded in production only by wheat and corn.

In the USA grain sorghum is grown primarily in the Great Plains area reaching from the Lower Rio Grande Valley of Texas to North Dakota. The distribution of grain sorghum production is shown in Fig. 1. Sorghum is regarded as essential to Great Plains farming. Grain sorghum is the “wonder crop of the Plains” much like soybeans are the wonder of the Midwest.

Sorghum is adapted from the tropics to latitudes of 45 degrees. In general, sorghums are cultivated in areas that are too dry or too hot for successful corn production.

Sorghum probably originated in Africa. Wild species are found in East-Central Africa today. Plant breeders explore this region when looking for new germplasm in order to incorporate desirable characteristics into present genetic lines. A carving that depicts sorghum was found in an Assyrian ruin dating from 700 B.C. Early records have shown sorghum to exist in India in the first century A.D. The first sorghum seed was released by the United States Department of Agriculture in 1857.

Grain sorghum has many uses. In the USA it is primarily a feed grain, but in parts of Asia and Africa it is the chief food grain. It has been reported that about 75 percent of the world crop is used for human consumption. The use of grain sorghum for human food in the USA could be expanded greatly.