

DRY MILLING OF GRAIN SORGHUM
FOR GRITS ON ROLLER MILLS

by

ABDELRAHMAN A. ABDELRAHMAN

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Approved by:


Major Professor

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INTRODUCTION

Many diverse plant forms are included in the species Sorghum bicolor (LINN.) (73) such as the sweet sorghums, sudan grass, broom corn, and the grain sorghums (44, 77). Grain sorghum is cultivated specifically for the grain and is found throughout the world though it be known by many names. Its popular name in the United States is 'milo' (77) while in India it is called 'jowar' and in Sudan 'durra' (69, 79). Sorghum is a tropical plant, a native of Africa and India (25, 44). It grows mainly in regions where the climate is too hot and dry for other cereals to be produced successfully (11). The major producing countries are the United States, India, Red China, Ethiopia, South Africa, Nigeria, Argentina and Mexico (57). The average world production for the last five years was about 51 million metric tons (22). About 75% of this production is consumed by humans (25, 39). In parts of Africa, Asia and Latin America it forms a staple part of the diet (30). It constitutes more than 70% of the total calories and furnishes much of the protein in the diet (73). However, most sorghum produced in the U. S. is used for livestock feed, with only a small quantity used for industrial and food purposes (30, 62).

Although the use of sorghum for human food is widespread and the potential for other uses is great the technology for milling sorghum is far from adequate. Most of the grain is milled traditionally either by grinding the whole grain in stone mills or by coarse grinding in a wooden mortar and pestle made of heavy wood (42, 46). Research towards the development of improved methods for milling sorghum started during