

WHEAT QUALITY AS INFLUENCED BY CULTURAL AND CLIMATIC INTERACTIONS

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ABSTRACT

Quality is very important in the production of wheat. Differences in the characteristics of wheat flour determines its use, be it bread, pasta, and so forth. These differences also reflect a difference in price per bushel. Cultural practices and climate can have a large effect on the quality of wheat. These factors affect many different aspects of the wheat industry from the plants in the field to their final products in the market. In this study different varieties of winter and spring wheat, geographical location, and historical wheat data are taken into consideration. Data collection is primarily done through soil and grain samples, as well as, weather stations. Also, selenium levels in the flour and soil has been analyzed, a common attribute in South Dakota. Analysis through Geographic Information Systems (GIS) is the primary tool used for data analysis and display. This project is supported from the South Dakota Wheat Commission.

Keywords

Wheat, flour, selenium, climate, GIS