The Economic Feasibility of Controlled Atmosphere Storage For Sweet Onions

by

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Problem

The availability of sweet onions from a particular producing area has been limited to a very short season of about six to ten weeks each year, primarily because of perishability. A recent breakthrough at the University of Georgia, though, has resulted in successful storage of sweet onions for up to seven months with only a one percent loss in inventory and without a material increase in pungency. The relatively long-term storage is made possible with the discovery of a unique mix of the atmosphere, relative humidity, and temperature in a controlled environment. The purpose of this study is to determine the economic feasibility of controlled atmosphere storage for sweet onions.

Methodology

Preliminary investigation entails an economic engineering approach. Breakeven analysis is being conducted, with the initial assumption that storage occurs over a period of seven months with a uniform distribution of sweet onions being released to the market.

Implications

It may be economically feasible to store and market sweet onions over most of the year, given the early harvesting season in the southern United States and the later season in the northwestern United States.

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