

TABLE OF CONTENTS

President's Address
Yield and Quality as Affected by
Early and Late Fall and Spring
Harvest of Sugarbeets



Bacterial Vascular
Rot of Sugarbeets
Molecular Age of
Inoculation and
Susceptibility to
by Rhizina
Quality Components
Beets
Respiratory Disorders
for the Development
proved Sugarbeet
Effect of Light on
of Commercial Cut
Threat Sugarbeets
W. M. Carlsson

DONALD L. OLDEMEYER

**President of the American Society
of Sugar Beet Technologists for 1985-1986
is Donald L. Oldemeyer, Manager - Seed
Production and Development, The Amalgamated
Sugar Company, Nyssa, Oregon**

Harvest of Sugarbeets
and the
Certain
Molecular
Respiratory
for
40-Year
Rotary

The President's Address

Robert E. Munroe

Welcome to the 23rd General Meeting of our Society. This is the 48th year of our Society's existence. That makes the next meeting the 50th Year Anniversary and is cause for a Grand Celebration. This meeting will be held at the Hilton Hotel in Phoenix - March 1 through 5, 1987.

The Society is made up of 575 individuals and company members. This membership represents 39 states, 4 provinces of Canada and 23 countries outside North America.

Attendance at this meeting shows 600 men and 200 women, which is an excellent attendance.

This year the Society has reached another milestone. Our Society is now the American Society of Sugar Beet Technologists, Inc. We are incorporated in the State of Colorado as a non-profit corporation and Jim Fischer is working out the details with the lawyers now.

Four serious trends continue to effect the U.S. sugar business.

1. Increase in HFCS and Low Cal market share.
2. Chaotic world market with subsidized sugar exports.
3. Takeovers and purchases which make sugar companies subsidiaries of other companies.
4. Fuel efficiency by process steam savings and changes from gas to coal.

TREND 1 - Comparison of per capita sweetener consumption in 1975 and 1983 is startling.

	1975	1983	1992
Total lbs.	124.2	132.9	148
Sucrose	72% 89 lbs.	53% 70.5 lbs.	42% 62 lbs.
HFCS	4% 5 lbs.	23% 31 lbs.	31% 46 lbs.
Glucose			
Dextrose	18%	16%	
Non-Caloric	5%	7%	
Other	1%	1%	

It is projected that HFCS will rise to 31% by 1992. The consumption will also rise to 148 pounds per person by 1992. This change in use from sucrose to HFCS has been advancing rapidly since the soft drink companies have approved HFCS use in soft drinks. This displacement of sucrose by HFCS should end soon and sucrose useage should stabilize. The competition will then shift to HFCS and Low Cal Sweeteners in soft drinks.

TREND 2 - The chaotic situation in world sugar imports is apparent from the lack of any of the international sugar committees to reach agreement or even get some of the major producers to attend. This situation is unlikely to change and the only defense is for each major using country to protect their own production by import quotas or tariffs. The current U.S. program had provided support but beet factories continue to close so the support would not seem to have stabilized the domestic industry. Continued attention to this situation by all segments of the domestic industry is necessary to have a stable domestic production.

TREND 3 - The list of ownership changes continues to grow. Amalgamated purchased; Michigan Sugar purchased; Holly Sugar threatened with a takeover; Monitor Sugar purchased; Amstar-Spreckels is now a private firm and Hunt International has Great Western for sale. Only the co-operatives of the Dakotas and Minnesota area have remained as they were. These changes certainly show the turmoil that the industry is in.

Also a spinoff of these conglomerates and subsidiary status of the sugar companies is the competition for funds. Debt service and capital projects needs by other subsidiaries can cause difficulties in finding enough money to go around. Certainly some capital expenditures are necessary to maintain the business and cannot always compete on an earnings basis. Yet provision for these needs must also be met.

TREND 4 - Energy conservation and the savings involved has been an excellent example of good application of

technology. The reduction in the use of process steam and conservation programs has greatly reduced the number of therms per CWT in making sugar. In addition, switching from expensive natural gas or oil to coal has been a rewarding experience. Each of the beet companies had made great strides with the use of boiler conversion to coal, boiler replacement with coal fired units, sun drying of pulp, purchase of more efficient pulp presses, provision of much more heating surface to reduce the steam demand. These have been exemplary responses to the challenges at hand.

However, the challenge remains before us. A concerted effort by technologists and business managers will be required to overcome most of the problems which remain ahead. As regards energy, great improvements have been made, but certainly more are necessary and fortunately, this industry has the talent to do so.

Increased temperatures (7, 10, 15, 11)

The closing of some sugar factories and low prices currently received for sugar crops has increased demand by farm managers for increased storage allocation for sugarcrops. Present low world sugar prices and the sugar-crop industry of continued sugar legislation discourages the expansion of the existing and processing facilities in fact. Methods and procedures are needed to increase the storage of beet roots that can be processed using existing equipment and facilities.

The objective of this study was to evaluate methods and procedures where factories can increase the amount of beet roots processed with existing equipment by methods such as early and late fall and spring harvest of

Contributed from the U.S. Department of Agriculture, Agricultural Research Service, and The Associated Sugar Co., in cooperation with the University of Idaho College of Agriculture Research and Extension Center, Elginville, Idaho. The authors are Bill Brubaker, Idaho State University Extension Specialist, Elginville, ID 83421, and Arthur W. Smith, the Associated Sugar Company, Twin Falls, ID 83421.