

ADDRESS GIVEN TO THE 13TH REGIONAL MEETING OF
THE AMERICAN SOCIETY OF SUGAR BEET TECHNOLOGISTS

By: B. E. Easton 1/

It is a great honor for me to appear before you as President of this fine Society and to take part in your regional meeting. It is also a great pleasure to be the first Canadian to have been elected to this high office. I can assure you, my associates and company share with me, sincere appreciation for this honor.

For the benefit of our newer members, I would like to briefly review the history of our National Society. It all started from a round table conference of leading sugar beet scientists held in Colorado in 1937. I am pleased to report our former Director of Research, the late Dr. H. D. Brown, was in attendance at that meeting, so our company along with several others in the eastern area have been participating since the start.

The Society is an organization formed to foster all phases of sugar beet and beet sugar research and to act as a clearing house for the exchange of ideas resulting from such work.

At San Francisco in February, 1964, the 13th General Meeting was held in the 27th year since its formation. It was one of the largest on record. The Society has over 750 members and represents 38 states, plus the District of Columbia, five provinces from Canada and 22 foreign countries. The official publication called the "Journal" of the American Society, now has a circulation of over 1100 copies which speaks well for its growth. It has been the policy to hold the national meeting every two years and rotate the site so that as many local people as possible could attend when it was in their area. The next meeting is in February, 1966, and is being held in Minneapolis, Minnesota; the first time it has been in that district. I might say at this time if the Great Lakes area desires this convention in 1968, it is not too soon for those interested in bringing it here to start negotiations and representations to the Society executive for consideration.

It is interesting to also record that the National Society's by-laws provide for regional meetings to be held in the intervening years. The first such meeting was held in Detroit on February 9th and 10th, 1939, and we have met every two years since that date. Many in this room, including myself, were present at that first historic meeting. Besides several times at Detroit, meetings have been held at Saginaw, East Lansing, and Chatham, Ontario, Canada.

Why did our leaders in the industry of 25 to 30 years ago join together to form this Society? I firmly believe that it was due to an unshaken faith in the future of the beet sugar industry and a genuine desire to improve it. Secondly, to compete, any industry must be healthy. To combat disease and insect problems

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along with necessary cultural improvements, it was quite evident beet research was required. At the first regional meeting, the President of the Farmers & Manufacturers Beet Sugar Association, Mr. James E. Larrowe, stated that in his opinion, "During the past 30 years there had been very little improvement or progress in the production of sugar beets". He cited yield per acre as being the most important single factor where there had been no change.

We have had many outstanding scientists speak at our previous conventions and when searching for a definition of research, I turned to the presentation made in 1959, at Chatham, Ontario, by Dr. J. J. McLachlin, President of the Ontario Agricultural College. In his opinion, research is essentially delving into the unknown in a systematic manner and interpreting the observations made. Effective research, fundamental or applied, calls for a systematic approach to the problem through experimentation, accurate observations, and valid interpretation for constructive application. Too often the full effectiveness of the research is lost because the last link in these three aspects, valid interpretation for constructive application, is not developed to the extent it should be.

During his fine address, Dr. McLachlin stated, "Had there not been research, both of the two sources of sugar, cane and beet, would be out of production due to disease and insect problems".

At this point I would like to pay tribute to other institutions and societies that have helped the beet industry attain its present status. Most sugar companies have spent thousands of dollars for research. Dedicated personnel have worked many hours to improve the technique of growing and processing sugar beets. This includes many growers who have offered their land, time and services to help out when called upon.

Since 1934, the Farmers & Manufacturers Beet Sugar Association has been a steady bright light, keeping us informed of the latest developments and acting as our leaders in coordinating research data.

I would like to pay special tribute to the United States Department of Agriculture, and particularly to our plant breeder friends at Beltsville, and Michigan State University. Their efforts no doubt saved our industry from disaster when *Cercospora* first appeared in the early thirties. Since that time they have continued to give us outstanding leadership in the development of new varieties, including the breeding in of Monogerm characteristics to our existing blight resistant Multigerm seed.

The state universities in Michigan, Ohio, Wisconsin and Ontario, have all played an important part in the development of our research.

Other federal government departments in both the United States and Canada have continuously supported our projects when called upon.

The Beet Sugar Development Foundation, of which Farmers & Manufacturers Beet Sugar Association is a member, acts as a clearing house on a national level for all phases of beet research.

It never ceases to amaze me the time and effort these government and society members are willing to spend for the welfare of our industry. It is certainly appreciated by both the processors and the growers.

It was interesting for me to look at the first regional program in 1939. Here are the more important subjects that were discussed at that date:

1. Low yield and sugar content.
2. Need for a precision drill.
3. Possibility of thinning beets mechanically -
Dixie Chopper.
4. Blight resistance in varieties.
5. Knowledge on how to properly dust and spray for blight.
6. Placement of fertilizers and use of higher amounts.
7. Soil testing.
8. Cost studies.
9. Labor studies.

As you will see, most of these problems have been solved. Let us record some of the accomplishments in the last 26 years:

1) New seed resistant to Cercospora and later Blackroot, was developed and undoubtedly saved the industry.

2) Facilities for full scale production of commercial seed were provided, thus preventing a catastrophe when European supplies were cut off during World War II.

3) Machinery was developed for successfully planting segmented seed -- the first big step forward in the reduction of hand labor.

4) From the meager start with the Dixie Chopper, new mechanical thinners that do an acceptable job are now available.

5) Complete mechanical harvesting was developed in a relative short time.

6) Monogerm seed, discovered in 1947, is now used on 100% of the acreage in most districts.

7) Somewhat slower in development, herbicides which definitely control weeds, show great promise for the future.

- 8) Tonnage and sugar per acre have shown a marked increase.
- 9) Better storage of sugar beets and the use of ventilation has allowed wide-open delivery by the growers.
- 10) Much improved receiving equipment at the factories and loading points has made it easier for growers to unload. In 1939, 100% of the beets grown in Ontario, were unloaded by hand.
- 11) A sizeable reduction in the labor force with less labor blocking more beets.
- 12) Improved cultural practices such as fertilization, rotations, crop protection sprays and many other such techniques.

In spite of those imposing achievements, there are some quite formidable problems still to be overcome which I would like to discuss briefly.

If one takes the time to go back over the papers of earlier meetings, it is amazing to see the terrific gap of time it takes for resultant action after research interpretations have been recorded. In other words, scientists were recommending action for some of our problems several years before commercial treatment actually became a fact. I firmly believe this is an area where our regional meetings can be of great service. On the national level our top scientists get together every two years and present technical papers on their latest findings. It is up to our companies' and society personnel to pick up this information and thoroughly acquaint our associates and growers of the facts. Many of you here today are field representatives and you are the most important link between such information and the designated group of growers you serve. It is my sincere wish that meetings of today's type will be used toward that end.

Let us now record some of our urgent needs:

- 1) There is still a requirement for further labor reduction and some of us hope for eventual elimination of labor. Mr. C. A. Coryell, President of the Monitor Sugar Division, Bay City, Michigan, at our convention in 1957, strongly stressed the same need.
- 2) As mentioned just a moment ago, there is a need for more efficient use of information. We must also learn to use more efficiently the actual machinery and tools we have available to produce a better crop at a lower cost of production. The search for improved herbicides for complete weed control must be expanded.
- 3) If you go into any sugar factory today, you see a worried and puzzled look on most of our senior factory personnel. Why are they experiencing severe storage losses and why is extraction of sugar from the beets steadily declining? These problems are

undoubtedly among the most difficult to solve, but they are not impossible. Michigan Sugar Company's new laboratory shows promise for the future.

4) We are still in the ever present struggle with other sources of sugar and overproduction in world markets. We, in Canada, are particularly vulnerable to violent price fluctuations as our price structure closely follows the world market.

Our Society, along with the sugar beet industry, faces a great challenge. We must share the responsibility of keeping the industry healthy in all respects during changing times.

The late Geoffrey S. Childs, then President of the Michigan Sugar Company, gave the keynote address at our 1947 regional meeting. Here are some of his thoughts from an inspiring address:

"Every worthwhile job has its difficulties and dangers.

"There is always the possibility of overconfidence before results are really proven.

"There is always discouragement over imagined lack of progress.

"There is always need for the balance of the theoretical vs. the practical.

"However, bear in mind the fact that all the companies in the eastern area are in full agreement on the value of, and the need for cooperation in research and the free exchange of ideas."

What Mr. Childs said then is certainly still true today.

Before I conclude, there are two items I would like to mention. The first is the forthcoming visit in June of this year of a delegation from our European counterpart, the International Institute of Sugar Beet Research commonly called I.I.R.B. You will soon hear more about this return visit to the United States and Canada and at this time may I invite you to take part in the regional program and help us give these friends a really sincere welcome.

Secondly, for future regional meetings I would recommend that this group consider holding business meetings as part of the programs. At that time the new executive could be elected. In addition, a site committee could bring in their recommendations for the next meeting place. As we grow larger, two years ahead is not too soon to start planning for future meetings.

I will conclude my remarks today with the hope that company field representatives and grower directors will assume leadership

to bridge the gaps between known research results and practical application in the field;

That company senior management will unite to support our Society in exploring every avenue to improve storage conditions and sugar extraction performance;

That we will continue to press forward in our goal to eventually grow beets without field labor;

And, that we will all unite to preserve this fine industry which may be described as "an ever present force for economic stability in 66 factory districts, spread over 22 states and 4 provinces and, of course, with special emphasis on our own Great Lakes area".

Let me close by congratulating the committee in charge of arranging for this regional meeting and having such a good practical program.