PRESIDENT'S MESSAGE
FLORIDA DIVISION

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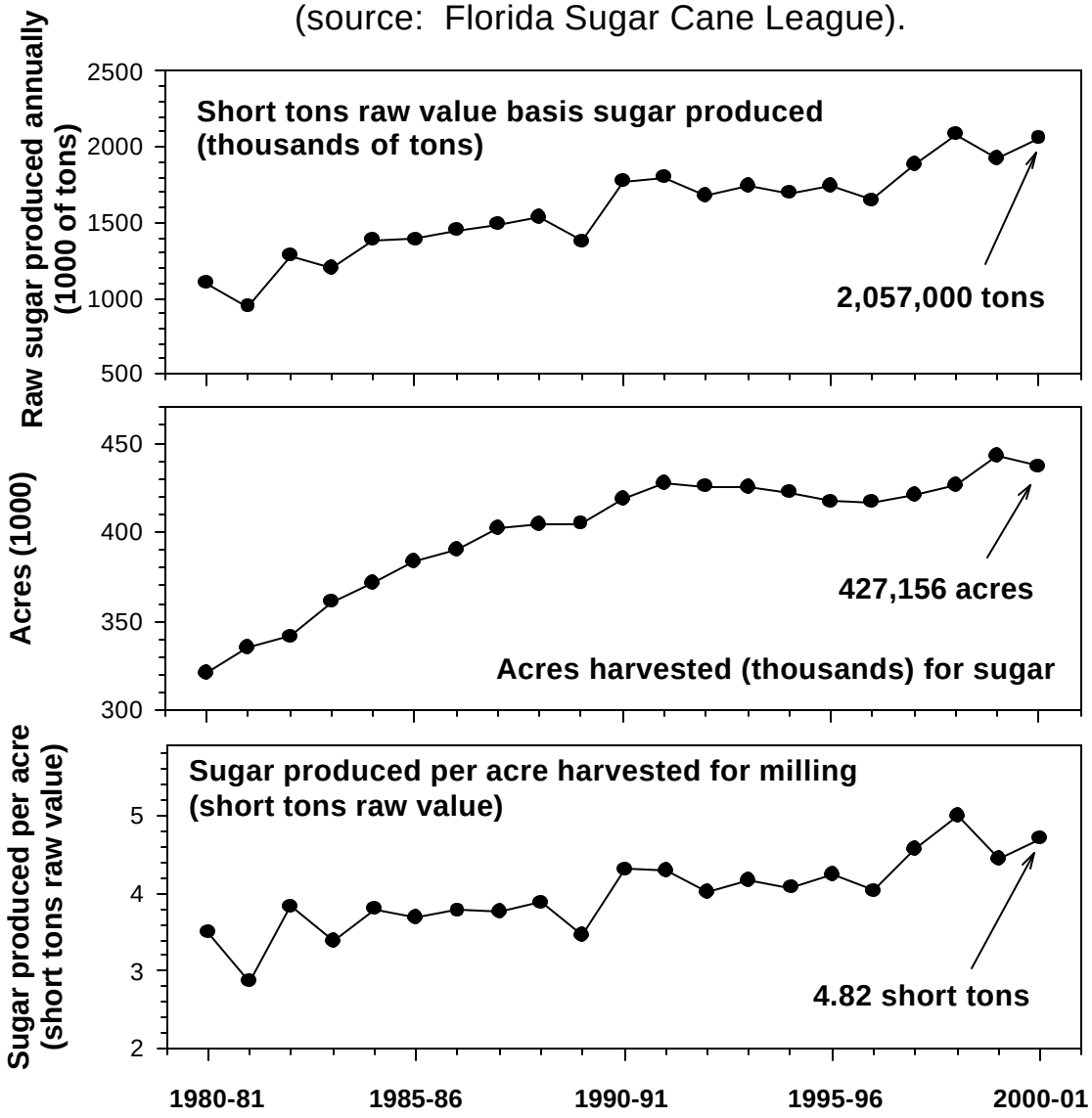
On behalf of the Florida Division of the American Society of Sugar Cane Technologists, I bring the Louisiana Division greetings and thanks for hosting this year's annual joint meeting. To my Florida colleagues, I thank you for giving me the opportunity to serve as your president this year. It has been a privilege and an honor.

Following our Society's tradition, I offer the following summary of the harvest season just completed in Florida. A total of 445,202 acres of cane was grown in Florida this past season, of which 427,156 acres were harvested for sugar. The first mill to begin grinding started on October 12, 2000, and the last mill to complete its crop finished on April 7, 2001. The 2000-2001 harvest season therefore spanned 177 days. On an individual mill basis, the shortest grinding season was 125 days and the longest was 172 days, with an average of 153 days across Florida's six mills. Two back-to-back hard freezes occurred during early January 2001, about mid-way through our harvest season. These freezes forced growers and mills to quickly prioritize the order in which to harvest the remaining fields.

The 2000-2001 harvest season was our second largest over the last 20 years with respect to raw sugar produced (Figure 1). According to records compiled by the Florida Sugar Cane League for the 2000-2001 harvest season, Florida sugarcane growers and mills produced 2,057,000 short tons raw value basis sugar and 106,500,000 gallons of 79.5° final molasses from 17,320,000 gross tons of cane. The average sugar recovery per net ton of cane was 251.7 pounds. The average cane yield for the harvest season was 40.6 gross tons of cane per acre with an average yield of 9,435 pounds of 96° sugar per acre. The January freezes reduced overall yield during the 2000-2001 harvest season and have hurt the yield potential of cane being grown for the 2001-2002 harvest season.

As every ASSCT member knows, the price of raw sugar took a dive early during 2000, dropping to a record low of 16 cents per pound of raw sugar. Although prices have improved somewhat, economists forecast that we may never again see raw sugar above 20 cents per pound. A permanent, large drop in value may occur if the sugar policy in the Farm Bill is not revamped, if the North American Free Trade Agreement (NAFTA) problems with Mexico are not resolved, and if the importation of molasses stuffed with sucrose from Canada continues.

Figure 1. Some harvest figures for the Florida sugar industry (source: Florida Sugar Cane League).



If sugarcane growers in the United States find themselves living with a permanently depressed sugar market, we will have to scramble to find ways to enhance productivity and reduce production costs. In this event, a number of avenues could be explored for both the milling and agricultural sides of our industry. These avenues include increased automation and mechanization; decision-making computer models; modified agronomic systems; biotechnology; and enhanced biological systems. In the face of these challenges (and because I am an entomologist), I would like to share with you a few thoughts about pest control. An underlying stimulus for my comments was the following question: If sugar prices drop, how can we reduce losses to pests and simultaneously reduce our expenditures on pest control without sacrificing productivity?

Pest problems in our sugarcane fields fluctuate from year-to-year and from decade-to-decade. This is true with respect to the specific pest species, the intensity of their damage, and

the regional spread of their infestations. Each of us knows the particular complex of pest species we need to be concerned about. Just because 1999 or 2000 was a light year with respect to infestations and damage by these pests does not mean they have gone away.

Wireworms are currently the most important insect pests of sugarcane in Florida. Fortunately, chemical control tactics for wireworms are effective. Two granular organophosphates are labeled for wireworm control: ethoprop (Mocap) and phorate (Thimet). Unfortunately, due to factors such as the Food Quality Protection Act passed by Congress and supported by our industry, the sugarcane labels for these two pesticides could soon be in jeopardy, perhaps as early as this year. Our industry therefore needs to be searching for alternatives. I call upon our universities, the United States Department of Agriculture and our friends in the chemical industry to assist us with this.

Florida sugarcane growers usually apply a pesticide for wireworm control once every three to five years when they plant a field unless they are planting after rice. The extent to which these insecticide applications are needed remains unclear. Growers would like to reduce their dependency and expenditures on insecticides for wireworm control in Florida, but they need help from scientists to do this.

The lesser cornstalk borer continues annually to be a common pest in some Florida sugarcane fields. Management guidelines and emergency control tactics are currently not available for this pest in sugarcane. We could use help from our universities, the USDA and the chemical industry in coming up with an effective, affordable management program for the lesser cornstalk borer.

The sugarcane borer is recognized as being a more important economic pest in Louisiana than in Florida. However, growers need to remember that the borer does cause economic losses in Florida sugarcane. Granted, the borer causes larger economic losses during some years than others, and outbreaks are more likely to occur in some areas than others. Some Florida growers lose money to the sugarcane borer, but they don't know it because they don't scout. While emergency control tactics are available for the borer, the cost of these in conjunction with the cost of a traditional scouting program may not be profitable during some years except in localized areas. Monitoring methods less expensive than traditional scouting might help with this problem.

This is the new millennium, the age of new and constantly changing technologies, computers and computer modeling. Researchers working in sugarcane pest control should take greater advantage of these technologies. It is possible that growers and scouting companies could reduce pest management costs and achieve satisfactory levels of pest control using technologies such as remote sensing and computer modeling to predict pest outbreaks in conjunction with either traditional scouting methods or new, nontraditional monitoring methods.

We have a good handle on control thresholds for two insects, the sugarcane borer and the sugarcane wireworm. We could use similar information for other insects pests such as the lesser cornstalk borer. Regardless of the particular insect pest, control thresholds need to be based not only on the value of pest damage but also on the costs of control and scouting. As the sugar

price decreases, the economic thresholds for pests increase. At or below some market value of sugar, pests may no longer cause economic losses large enough to justify expenditures on frequent scouting and emergency control, particularly if the cost of scouting and control increase. This would elevate the need for less expensive approaches to detecting and managing losses to pests. The development and implementation of low-cost, low-input management strategies such as pest-resistant clones and biological control could become critical.

Providing growers with sugarcane clones resistant to pests has been and will continue to be one of our most important strategies for pest control. This tactic could become essential for insect control if the market value of sugar drops. Louisiana has capitalized on plant resistance to the sugarcane borer, at least in the past. Economic damage by other pests--including the yellow sugarcane aphid and the lesser cornstalk borer--might be significantly reduced by growing varieties with even modest levels of pest resistance. Compromises may be necessary between yield and pest resistance. Conventional plant breeding programs need to be continued with increased emphasis on pest control. Although we do not know if or when we might be willing to market sugar from a genetically modified sugarcane, I believe we need to be developing transgenic clones with pest resistance and be prepared to implement them commercially.

Finally, the importance continues in intercepting sugarcane pests new to the United States. Four pests new to Florida sugarcane have been found over the past 25 years: the sugarcane aphid *Melanaphis sacchari*; the sugarcane delphacid *Perkinsiella saccharicida*, the sugarcane lacebug *Leptodictya tabida*, and the weevil *Metamasius hemipterus*. I commend Federal and State agencies for their daily efforts to catch exotic pests being imported into Florida, though increased resources are needed for these agencies to accomplish the job. This critical function is becoming harder and harder as foreign travel increases and more airports and marine ports accept foreign travel. Quarantining foreign plant material imported for scientific reasons remains critical. Ornamental and horticultural plants being brought into the United States must be screened for sugarcane pests. We need to support continued funding of quarantine facilities such as the APHIS Federal quarantine center in Beltsville and ensure they use the most modern methods available to protect our industry. With respect to sugarcane pests already present in some areas of the United States, let's guard against spreading them to other areas.

In summary, certain sugarcane pests continue to reduce the profitability of growing sugarcane in Florida and will continue doing so if management tactics are not fully developed and used. Non-chemical control methods are needed for sugarcane wireworms in Florida but, until these are available, we need to ensure chemical control methods remain available. If the market value of sugar decreases, expenditures on pest control will need to be reduced without decreasing productivity in order to maintain profits. This can only be accomplished through the development of new low cost, low input management tactics. The members of this society have the expertise to address these issues. In the meantime, let's hope no new insect pests of sugarcane find their way into the continental United States.

I thank you for your attention and hope that this 31st Annual Meeting of the American Society of Sugar Cane Technologists is one of our most fruitful.