JAST
The Jamaica Association of Sugar Technologists

68th Annual Conference
November 10th & 11th 2005
Sunset Jamaica Grande Resort
Ocho Rios, St. Ann, Jamaica

“A Sugar Cane Industry for Jamaica”
The Jamaica Association of Sugar Technologists

68th Annual Conference

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THE JAMAICA ASSOCIATION OF SUGAR TECHNOLOGISTS

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PROGRAMME OF EVENTS

Friday, November 11, 2005

Joint Agricultural and Factory Sectional Meeting

8:00 am – 8:30 am
Registration
Session Chairman
Dr. Earle Roberts

8:30 am – 9:00 am
An Environmental Code of Practice for Jamaica's Sugar Cane Industry
Mrs. Elaine Manning - SIRI

9:00 am – 9:40 am
Report on the XXV International Society Of Sugar Cane Technologist Conference
Mr. P. Wright - SIRI
Of Sugar Cane Technologist Conference
Mr. T. Falloon - SIRI
and Enhance Sugar Recoveries at Appleton
Mr. N. Grimes - Appleton

9:40 am – 10:10 am
Impact of the EU's Proposed Price Reductions
on Cane Profitability
Mr. C. F. Woolery - SIRI

10:10 am – 10:45 am
COFFEE BREAK
Session Chairman
Mr. R. Karl James

10:30 am – 12:00 am
69th Annual General Meeting of Members of the Association

Agricultural Sectional Meeting

12:00 pm – 12:30 pm
Soil Test Assessment for Local Sugar Cane Soils: Standard Adequacies Employed at Sugar Industry Research Institute
Mr. J. Maxwell

12:30 pm – 2:00 pm
LUNCHEON BREAK

Session Chairman
Mr. Ian Maxwell

2:00 pm – 2:30 pm
Tillage Practice to Reduce Fuel Consumption
Mr. K. Chandon
Mr. L. Agra - SIRI

2:30 pm – 3:00 pm
Reflections on Different Aspects of Sugar Cane Variety Development in Jamaica
Mr. M. Bennett-Easy

3:00 pm – 3:30 pm
Biological Control of the Sugar Cane Stalk Borer Diatraea saccharalis Fabricius (Lepid:Pyralidae) in the Caribbean
Mr. T. Falloon - SIRI

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Awards Banquet
6:30 pm
Reflections on Different Aspects of Sugar Cane Variety Development in Jamaica

By
M. Bennett-Easy
Sugar Industry Research Institute

Abstract
Sugar Cane yields have fluctuated in some sections of the industry, at a critical time when various approaches are being contemplated to widen the range of by-products that can economically be exploited from sugarcane. Initiatives including ethanol production are predicated on the industry increasing sugar cane production above present levels. However, despite marked improvements in the inventory of new commercial varieties and introduction of a high-technology overhead irrigation infrastructure in sections of the arid St. Catherine and Clarendon plains, productivity continues to fluctuate. Productivity indices; t/ha and ts/ha have shown stability while sugar cane yields have shown wide variations, and present trends are pointing to yield decline.

In order to achieve high and sustainable levels of production and productivity an integrated approach involving better utilization of varieties to optimize yields, improve cultivation and management techniques should be given pride of place.

This paper examines and discusses three aspects of variety development programme and suggest ways of optimizing crop yields by using production data as a guide to adjust variety policies and exploit the potential of varieties to meet the industry’s production goals.

Key words: Sugar cane varieties, productivity, production, crop yield, production goals

Biological control of the sugar cane stalk borer Diatraea saccharalis Fabricius (Lepid: Pyralidae) in the Caribbean

By
Trevor Fallow
Sugar Industry Research Institute

Abstract
Some 18 species of Diatraea, the stalk boring pyralid moth, formerly subsisting on corn and other grasses, shifted to attacking sugar cane following its introduction to the Caribbean region by Spanish explorers towards the end of the 15th Century. Other stalk borer species, such as Castniomera licius and Eoreuma lofiniti add to the complex that attack sugar cane in varying numbers and intensities but D. saccharalis is generally regarded as the most important pest of the region. The biological approach to control began in 1915 when Lixophaga diatraecae was taken from Cuba to Louisiana. Since then stalk borer control in the Caribbean has been almost exclusively by biological methods. Initial approaches placed heavy emphasis on egg parasitoids of the Trichogramma spp. This later gave way to the larval parasitoids, such as L. diatraecae, Lidella minense and Paratheresia claripalpis, endemic to different zones within the region, and exchanged between industries. In course of the control effort grew to become big industry with countries such as Cuba establishing scores of laboratories for generating natural enemies. The braconid, Cotesia flavipes, imported from India in the 1960’s and established in most of the industries. There are signs of has since become the most successful parasitoid and is established in most of the industries. Most industries record noteworthy negative interaction between C. flavipes and native tachinid parasitoids. Most industries record noteworthy negative interaction between C. flavipes and native tachinid parasitoids. Most industries record noteworthy negative interaction between C. flavipes and native tachinid parasitoids. Most industries record noteworthy negative interaction between C. flavipes and native tachinid parasitoids.

Keywords: Biological control, Lixophaga diatraecae, Cotesia flavipes, antagonism