

SUGAR INDUSTRY AUTHORITY - JAMAICA



POST CROP BOOKLET 2019



WORTHY PARK



GOLDEN GROVE



APPLETON



FROME

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Variety Recommendations for Harvesting Periods and Soil Types

Table 2: Varieties recommended for Hanover & Westmoreland

Area	Harvest Periods	Soil Types		
		Light Soil	Clay Loam	Clay
Westmoreland and Hanover	Early	BJ7465	BJ7465	BJ7465
		BJ7015	BJ7015	BJ7015
		CR892023	CR892023	CR892023
		BJ7314	BJ7314	BJ8783
		BJ8783	BJ8783	BJ82105
		BJ82105	BJ82105	BJ7938
		BJ7938	BJ7938	BJ7452
		BJ7452	BJ7452	
		BJ78100	BJ78100	
	Middle	BJ7504	BJ7504	BJ7504
		BJ7015	BJ7015	BJ7015
		BJ7938	BJ7938	BJ7938
		BJ82119	BJ82119	BJ82119
		BJ7452	BJ7452	BJ7452
		BJ7465	BJ7465	BJ7465
		BJ82105	BJ82105	BJ82105
		BJ8783	BJ8783	BJ8783
		BJ78100	BJ78100	BJ78100
	Late	BJ7627	BJ7627	BJ7627
		BJ82119	BJ82119	BJ82119
		BJ8783	BJ8783	BJ8783
		BJ78100	BJ78100	BJ78100

Variety Recommendations for Harvesting Periods and Soil Types cont.

Table 3: Varieties recommended for Irrigated Clarendon and St. Catherine Plains

Area	Harvest Periods	Soil Types		
		Light Soil	Clay Loam	Clay
Irrigated Clarendon and St. Catherine Plains	Early	BJ7465	BJ7465	BJ7465
		BJ7015	BJ7015	BJ7015
		BJ7938	BJ7938	BJ7938
		BJ82119	BJ82119	BJ82119
		BJ82102	BJ82102	BJ82102
		BJ82105	BJ82105	BJ82105
		BT80311	BT80311	BT80311
		CR892023	CR892023	CR892023
		BJ8783	BJ8783	BJ8783
	Middle	BJ82119	BJ82119	BJ82119
		BJ7548	BJ7548	BJ7548
		BJ82102	BJ82102	BJ82102
		BJ78100	BJ78100	BJ8783
		BJ8783	BJ8783	BJ7504
			BJ7504	
	Late	BJ7627	BJ7627	BJ7627
		BJ8783	BJ8783	BJ8783
		BJ78100	BJ78100	

Variety Recommendations for Harvesting Periods and Soil Types cont.

Table 4: Varieties recommended for Upper St. Catherine and Upper Clarendon

Area	Harvest Periods	Soil Types		
		Light Soil	Clay Loam	Clay
Upper St. Catherine and Upper Clarendon	Early	BJ7015	BJ7015	BJ7015
		BJ7465	BJ7504	BJ7504
		BJ7314	BJ7314	BJ7314
		BJ7465	BJ7465	BJ7465
		BJ7627	BJ7627	BJ7627
		CR892023	CR892023	CR892023
	Middle	BT80311	BT80311	BT80311
		BJ7465	BJ7465	BJ7465
		BJ82119	BJ82119	BJ82119
		BJ7262	BJ7262	BT80311
	Late	BT80311	BT80311	
		BJ7627	BJ7627	BJ7627
		BJ8783	BJ8783	BJ8783
		BJ7015	BJ7015	BJ7015

Variety Recommendations for Harvesting Periods and Soil Types cont.

Table 5: Varieties recommended for St. Thomas

Area	Harvest Periods	Soil Types		
		Light Soil	Clay Loam	Clay
St. Thomas	Early	BJ7465	BJ7465	BJ7465
		BJ7938	BJ7938	BJ7938
		CR892023	BJ7452	BJ7452
		BJ8783	BJ7627	BJ7627
		BT80311	BJ7314	BJ7314
			BJ82105	BJ82105
			CR892023	CR892023
			BJ8783	BJ8783
			BT80311	BT80311
	Middle	BJ7938	BJ7627	BJ7627
		BJ82105	BJ7938	BJ7938
		BJ82119	BJ82105	BJ82105
		BJ8783	BJ82119	BJ82119
		BJ7504	BJ8783	BJ8783
		BT80311	BJ7504	BJ7504
		BJ78100	BT80311	BT80311
			BJ78100	
	Late	BJ7627	BJ7627	BJ7627
		BJ8783	BJ8783	BJ8783
		BJ7938	BJ7938	BJ7938
		BJ78100	BJ78100	

Variety Recommendations for Harvesting Periods and Soil Types cont.

Table 6: Varieties recommended for St. Elizabeth

Area	Harvest Periods	Soil Types		
		Light Soil	Clay Loam	Clay
St. Elizabeth	Early	BJ7314	BJ7314	BJ7314
		BJ7015	BJ7015	BJ7015
		BJ7938	BJ7465	BJ7465
		BJ78100	BJ7938	BJ7938
		CR892023	BJ78100	CR892023
		BJ82105	CR892023	
			BJ82105	
	Middle	BJ7262	BJ7465	BJ7465
		BJ7465	BJ82105	BJ82105
		BJ82105	BJ7504	BJ7504
		BJ7938	BJ7938	BJ7938
		BJ7627	BJ7627	BJ7627
		BJ82105	BJ82105	
		BJ78100	BJ78100	
	Late	BJ7465	BJ7465	BJ7465
		BJ7627	BJ7627	BJ7627
		BJ7314	BJ7314	BJ7314
		BJ82105	BJ82105	
		BJ78100	BJ78100	

Variety Recommendations for Harvesting Periods and Soil Types cont.

**Table 7: Varieties recommended for Trelawny, St. James
and St. Ann**

Area	Harvest Periods	Soil Types			
		Light	Soil	Clay	Loam
Trelawny, St. James and St. Ann	Early	BJ7465		BJ7465	BJ7465
		BJ82119		BJ82119	BJ82119
		CR892023		BJ7504	BJ7504
		BJ78100		CR892023	CR892023
		BJ7938		BJ78100	BJ7938
		BJ7015		BJ7938	BJ7015
		BJ7548		BJ7015	BJ7548
		BJ8783		BJ7548	BJ8783
	Middle			BJ8783	
		BJ82119		BJ82119	BJ82119
		BJ7548		BJ7504	BJ7504
		BJ7627		BJ7465	BJ7465
		BJ78100		BJ7548	BJ7548
		BJ7938		BJ7627	BJ7627
		BJ8783		BJ78100	BJ7938
				BJ7938	BJ8783
				BJ8783	
	Late	BJ7627		BJ7627	BJ7627
		BJ8783		BJ8783	BJ8783
		BJ78100		BJ78100	BJ82119
		BJ82119		BJ82119	BJ7015



Seedlings being prepared for the first phase of experiments

Over 43,000 seedlings (potential varieties) were planted in the fields for evaluations



Seedlings planted out in the field.

Cane
Production and
Harvesting
Data

Table 11: Area Reaped as a Percentage of Area in Cane by Factory Area: 2017-2019

2019

Factory Area	Area in Cane (ha)	Area reaped (ha)	Percent area reaped (%)
Appleton	3,995	3,383	85
Everglades	-	253	-
Frome	6,685	4,536	68
Golden Grove	2,533	2,061	81
Monymusk	4,815	2,263	47
Worthy Park	3,650	3,264	89
Grand Total/Average	21,678	15,760	73

** Provisional report*

2018*

Factory Area	Area in Cane (ha)	Area reaped (ha)	Percent area reaped %
Appleton	3,995	3,637	91
Everglades	2,876	1,290	45
Frome	6,685	5,228	78
Golden Grove	2,533	2,222	88
Monymusk	4,815	3,582	74
Worthy Park	3,650	3,275	90
Grand Total/Average	24,554	19,234	78

** Provisional report*

2017

Factory Area	Area in Cane (ha)	Area reaped (ha)	Percent area reaped %
Appleton	4,030	3,754	93
Everglades	-	1,028	N/A
Frome	10,400	4,774	46
Golden Grove	2,940	2,060	70
Monymusk	7,763	4,245	55
Worthy Park	4,354	3,642	84
Grand Total/Average	29,487	19,503	66

**Table 12: Summary Cane Production & Productivity
Report: 2017 – 2019**

Year	Area reaped (ha)	Canes reaped (tonne)	96° Sugar (tonne)	tc/ha	ts/ha
2016	21,138	1,127,057	82,855	53.32	3.92
2017	19,503	1,142,429	87,990	58.58	4.51
2018*	19,234	1,004,985	82,360	52.25	4.28
2019	21,678	736,788	59,112	46.80	3.76

* *Provisional Report*

A total of 1,947 farmers delivered canes during 2018/19 compared to 2,432 in 2017/18

Table 3: Tonnes Cane Per Hectare (tc/ha) for Farmers and Estates: 2018 vs 2019

Extension Area	Farmers		Estate	
	2017/18	2018/19	2017/18	2018/19
Appleton	44	36	56	46
Trelawny & St. James	23	0	15	40
Frome	51	45	73	58
Golden Grove	68	58	56	54
Monymusk	42	32	53	28
Worthy Park	52	42	78	70
TOTAL	47	42	65	52

Source: All Island Jamaica Cane Farmers Association, 2019. Preliminary data.

**Table 3b: Cane Productivity for Farmers and Estates:
2018/19 Crop**

Cane Productivity 2018/19 Crop						
Extension Area	Farmers			Estates		
	Production	Ha Reaped	tc/ha	Production	Ha Reaped	tc/ha
Appleton	35,799	995	36	87,959	2,388	46
Trelawny & St. James	5,056	253	20	0	0	0
Frome	80,524	1,775	45	159,845	2,761	58
Golden Grove	72,809	1,260	58	43,446	801	54
Monymusk	49,703	1,603	32	19,148	660	29
Worthy Park	61,650	1,468	42	125,741	1,796	70
Total/Av.	305,541	7,354	42	436,139	8,384	52

Source: All Island Jamaica Cane Farmers Association

Table 2g: Total Tonnes Stand-over Cane: 2018/19

Area	Tonnes Cane (tc)		
	Estate	Farmers	Total
Appleton	1,619	3,486	5,105
B/Lodge & Bog Walk	1,800	1,500	3,300
Trelawny & St. James	1,000	4,000	5,000
Frome	6,000	2,000	8,000
Golden Grove	0	0	0
Monymusk	350	7,650	8,000
New Yarmouth	0	0	0
Worthy Park	0	15,000	15,000
Total	10,769	33,636	44,405

Source: All Island Jamaica Cane Farmers Association

**Table 2h: Total Stand-over Cane for Estates and Farmers:
2018 vs 2019**

Extension Area	2018	2019	Variance (Tonnes)	% Change
Appleton	2,000	5,105	-3,105	-155
Bernard Lodge and Bog Walk	5,900	3,300	2,600	44
Trelawny and St. James	6,000	5,000	1,000	17
Frome	25,876	8,000	17,876	69
Golden Grove	8,520	0	0	0
Monymusk	8,000	8,000	0	0
New Yarmouth	0	0	0	0
Worthy Park	10,000	15,000	-5,000	-50
Total	66,296	44,405	21,891	33

Source: All Island Jamaica Cane Farmers Association

Table 2d: Total Area Affected by Illicit Fires: 2018/19 Crop

Extension Area	Estates			Farmers		
	No. of Fires	Hectares	Tonnes	No. of Fires	Hectares	Tonnes
Appleton	1	12	600	3	19	630
Bernard Lodge and Bog Walk	4	100	2,000	5	400	5,800
Frome	135	3,988	34,306	33	133	6,555
Golden Grove	50	120	6,200	3	30	1,200
Monymusk	4	220	7,100	2	120	4,200
Trelawny and St. James	2	103	950	2	8	125
Worthy Park	0	0	0	5	7	190
TOTAL	196	4,543	51,156	53	717	18,600

Source: All Island Jamaica Cane Farmers Association

**Table 2e: Total Tonnes Cane Lost to Illicit Fires:
2018 vs 2019**

Extension Area	2018			2019		
	Estate	Farmers	Total	Estate	Farmers	Total
Appleton	1,065	4,955	6,020	600	630	1,230
B/Lodge & Bog Walk	620	3,920	4,540	2,000	5,800	7,800
Trelawny & St. James	1,700	327	2,027	950	125	1,075
Frome	43,888	36,775	80,663	34,306	6,555	40,861
Golden Grove	0	0	0	6,200	1,200	6,500
Monymusk	9,420	4,710	14,130	7,100	4,200	11,300
Worthy Park	0	495	495	0	190	190
TOTAL	56,693	51,182	107,875	51,156	18,600	69,756

Source: All Island Jamaica Cane Farmers Association

Table 2g: Tonnes Stand-over Cane: 2018/19 Crop

Area	Tonnes Cane (tc)		
	Estate	Farmers	Total
Appleton	1,619	3,486	5,105
B/Lodge & Bog Walk	1,800	1,500	3,300
Trelawny & St. James	1,000	4,000	5,000
Frome	6,000	2,000	8,000
Golden Grove	0	0	0
Monymusk	350	7,650	8,000
New Yarmouth	0	0	0
Worthy Park	0	15,000	15,000
Total	10,769	33,636	44,405

Source: All Island Jamaica Cane Farmers Association

Table 4a: Hectares Planted by Farmers and Estates

Area	Farmers			Estates			Grand Total
	N/Planting	Replanting	Total	N/Planting	Replanting	Total	
Appleton	4	27	31	0	132	132	163
B/L & Bog Walk	0	0	0	0	40	40	40
Tr. & St. James	0	0	0	0	40	40	40
Frome	0	21	21	0	62	83	104
Golden Grove	0	0	0	0	0	0	0
Monymusk	0	0	0	140	20	160	160
Worthy Park	0	23	23	0	39	39	62
Total	4	71	75	140	333	473	548

All planting done up to August 2019.

Source: All Island Jamaica Cane Farmers Association

**Table 4b: Total Hectares Planted by Farmers and Estates:
2018 vs 2019**

Extension Area	2018			2019		
	Estate	Farmers	Total	Estate	Farmers	Total
Appleton	56	55	111	132	31	163
B/L & Bog Walk	40	0	40	40	0	40
Tr. & St. James	0	2	2	40	0	40
Frome	443	74	517	62	21	83
Golden Grove	27	35	62	0	0	0
Monymusk	100	4	104	160	0	160
Worthy Park	132	56	159	39	23	62
TOTAL	797	198	995	473	75	548

Source: All Island Jamaica Cane Farmers Association

Table 1a: Rainfall Data (mm)

Table 8: Rainfall Totals for Cane-growing Areas		
Factory Area	2018	2019 (Up to August)
Appleton	1,738	1046
Bernard Lodge	754	551
Trelawny	700	-
Frome	2,593	1,426
Golden Grove	1,315	-
Monymusk (New Yarmouth)	924	517
Worthy Park	1,424	497

Factory
Performance
Statistics

Table 18. Industry Cane and Sugar Production for the years 2017 - 2019

Crop Year	Cane Ground for Sugar (t)	96° Sugar Made (t)	tc/ts
2017	1,133,353	87,990	12.88
2018	1,021,468	82,360	12.44
2019	736,788	59,112	12.46
3-Year Average	963,870	76,487	12.96

Fig. 4: Jamaica's Sugar Production 2017 – 2019

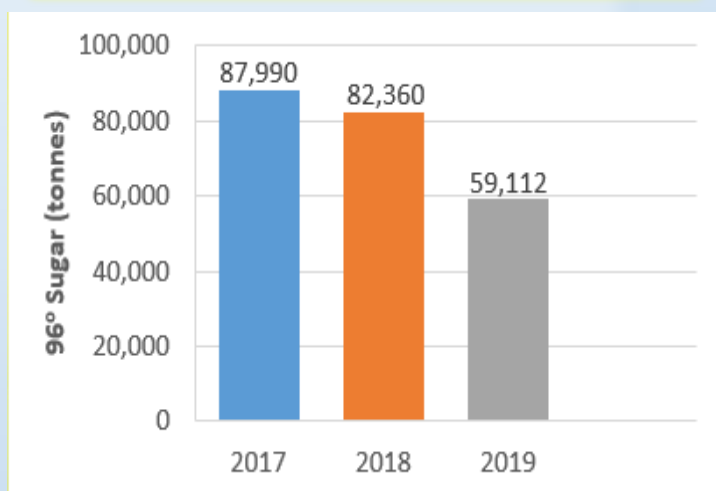


Table 19: Cane Ground and Sugar Production by Factories: 2017 - 2019

Factory	2018/19	
	Cane Ground for Sugar (t)	96° Sugar Made (t)
Appleton	164,896	10,925
Frome	240,813	17,288
G/Grove	116,345	7,310
W/Park	214,734	23,589
Total/Avg	736,788	59,112

Factory	2017/18	
	Cane Ground for Sugar (t)	96° Sugar Made (t)
Appleton	214,350	16,480
Frome	327,098	23,275
G/Grove	139,731	10,248
M/musk	104,192	8,105
W/Park	238,814	24,251
Total/Avg	1,024,185	82,360

Factory	2016/17	
	Cane Ground for Sugar (t)	96° Sugar Made (t)
Appleton	297,603	18,936
Frome	247,078	20,451
G/Grove	151,060	11,297
M/musk	176,029	11,230
W/Park	261,582	26,076
Total/Avg	1,133,352	87,990

- The Everglades Factory (Long Pond) did not operate for the 2017-2019 crops.
- The Monymusk Factory did not operate for the 2018/19 Crop.

**Table 20. Factory Recovery Index (FRI) by Factories
(2017 - 2019)**

Factory	FRI		
	2018/19	2017/18	2016/17
Appleton	63.14	80.24	72.31
Frome	77.54	81.86	77.92
G/Grove	65.97	81.62	84.74
M/musk	-	73.14	66.79
W/Park	93.67	95.51	94.35
Averages	77.96	83.49	79.22
Standard FRI	91.00	91.00	91.00

**Table 21: Jamaica Recoverable Cane Sugar (JRCS) by
Factories (2017 - 2019)**

Factory	JRCS		
	2018/19	2017/18	2016/17
Appleton	10.16	9.62	8.84
Frome	9.30	8.76	10.02
G/Grove	9.60	9.17	8.94
M/musk	0.00	10.61	9.59
W/Park	11.74	10.63	10.57
Averages	10.25	9.62	9.61
Standard JRCS	9.87	9.87	10.01

**Table 22: Tonnes Cane Per Tonne Sugar (tc/ts) by Factories
(2017 - 2019)**

Factory	Conversion (tc/ts)		
	2018/19	2017/18	2016/17
Appleton	15.09	13.01	15.72
Frome	13.94	14.05	12.08
G/Grove	15.92	13.63	13.37
M/musk	0.00	12.86	15.67
W/Park	9.10	9.85	10.03
Averages	12.46	12.44	12.88

**Table 23: Grinding Rates of Sugar Factories - Tonnes Cane
Per Hour (2017 - 2019)**

Factory	Rated Capacity (tc/hr)	Grinding Rate (tc/hr)		
		2018/19	2017/18	2016/17
Appleton	150	115.92	121.57	118.55
Everglades	75	-	-	-
Frome	200	141.21	157.10	174.04
G/Grove	75	75.17	72.93	76.56
M/musk	200	0	122.91	118.39
W/Park	70	69.18	70.60	70.26
Averages	128	100.37	105.89	109.81

**Table 24: Price Per Tonne Cane (J\$) by Factories
(2017 - 2019)**

Factory	Price/Tonne Cane (J\$)		
	2018/19*	2017/18	2016/17
Appleton***	3673.35	2,243.62	4,291.03
Everglades	-	-	-
Frome **	3272.00	3,038.80	4,761.67
G/Grove*	3411.02	3,930.60	3,752.09
M/musk***	0	2,619.25	4,101.95
W/Park ***	4574.59	2,629.25	4,588.24
Averages	J\$ 3,757.81		J\$ 4,291.03

**Table 25: Price Per Tonne Sugar (J\$) by Factories
(2017 - 2019)**

Factory	Price/Tonne Sugar (J\$)		
	2018/19*	2017/18	2016/17
Appleton***	59,000.00	42,000.00	72,457.38
Everglades		-	-
Frome **	59,000.00	56,550.00	72,000.00
G/Grove*	59,000.00	72,000.00	72,000.00
M/musk***		42,000.00	71,373.00
W/Park ***	60,000.00	42,000.00	71,646.00
Base Price/Tonne	J\$ 59,250.00	J\$ 50,910.00	J\$ 71,895.28

* Final Payment 2019

** Second Payment 2019

*** First Payment 2019

Table 2a: Cane Ground and Crop Duration by Factory Area: 2018/19

Factory Area	Cane Production		Crop Duration			No. of Farmers Supplying Cane
	Farmers	Estates	Start Date	Finish Date	Crop Days	
Appleton	63,215	101,681	15.2.19	2.6.19	107	449
Frome	80,968	159,845	3.1.19	8.5.19	126	545
Golden Grove	71,807	44,539	19.2.19	10.7.19	142	180
Worthy Park	88,993	125,741	4.1.19	24.6.19	172	773
Total	304,983	431,806			189	1,947

**Table 3a: Variance in Cane Ground for Farmers and Estates:
2018 vs. 2019**

Factory Area	Farmers' Delivery				Estates' Delivery			
	2017/18 Crop	2018/19 Crop	% Change	% of Crop 2018/19	2017/18 Crop	2018/19 Crop	% Change	% of Crop 2018/19
Appleton	62,120	63,215	2	18	152,231	101,681	-33	24
Frome	121,682	80,968	-33	26	205,416	159,845	-22	37
Golden Grove	85,330	71,807	-16	23	54,401	44,539	-18	10
Worthy Park	153,682	88,993	-42	29	85,159	125,741	48	29
Total	527,006	304,983	-42	100	497,207	431,806	-13	100

Pest and Disease Management

Bio-Control of Sugarcane Moth Borer

Damage caused by larvae of the sugarcane moth borer, *Diatraea saccharalis*, the key insect pest of sugarcane in Jamaica, continues to be an important source of yield loss incurred by Jamaican sugarcane farmers. The larva of the sugarcane borer is the destructive stage of the moth. All varieties of sugarcane currently grown in Jamaica are susceptible, but sugarcane varieties respond differently to damage and yield losses.

Management of *Diatraea spp.* in many sugarcane regions has largely focused on biological control. In 1970, *Cotesia flavipes*, a wasp, was imported, reared and released. It was not until 1983 that establishment of this bio-control agent was achieved. *Cotesia* rapidly became the dominant parasitic species of the borer with 59% parasitism.

In 2018, the Entomology lab at SIA-RD produced over 30,000 wasps locally and imported 350 thousand. These wasps were released across all cane growing ecosystem around the island with majority of the releases focused on the hotspot areas in Clarendon and St Catherine. Production of *Cotesia* continues with the aim of using this bio-control method to reduce negative effects of the stalk borer across the Industry.

In 2019, *Cotesia* (wasp) production was increased to over 50,000. The idea is to provide a robust and scalable Industry support mechanism in a pro-active manner.



BIOSECURITY ALERT



The **sugarcane stalk borer** poses a real threat to sugarcane in Jamaica. Cane growers in Clarendon and St. Catherine you are at a higher risk!

Help us to identify damage and different life stages of the pest as illustrated below:



Borer entry and exist holes



Borer tunneling



Dead heart symptom



Adult



Eggs



Pupae



Larva

If you find damage or larvae, please inform your local Extension Officer or an Entomologist at the SIA-RD



Extreme borer damage

We thank you for helping to keep track of this pest!



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Major Diseases of Economic Importance to the Sugarcane Industry

Orange Rust

Towards the end of the year, orange rust leaf severity at Worthy Park was 6%, as opposed to the onset of the disease which, in June 2019, showed a leaf severity of 24%. The severity of the disease is determined by:

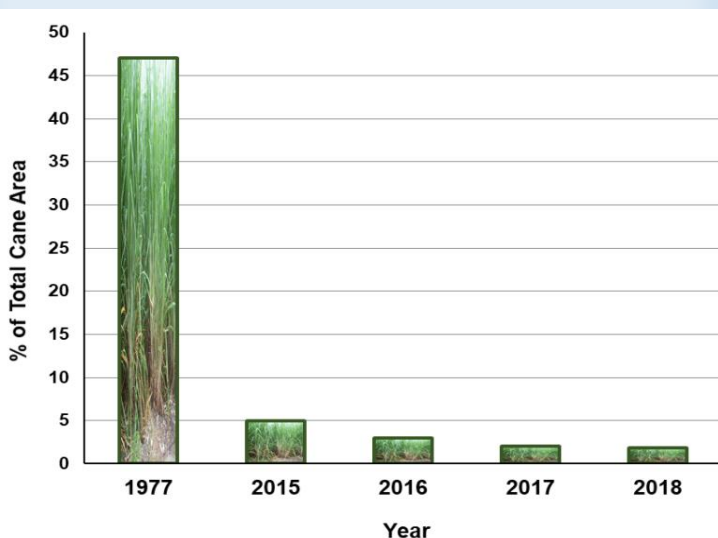
- ❑ **Weather conditions** - germination of **the** orange rust spore requires temperature between 11°C – 23°C and a relative humidity >97%.
- ❑ **Zone of field canopy affected** – Greatest yield effects occur when younger green leaves (upper four) in the shoot show obvious disease.
- ❑ **Varietal resistance** – has very significant effect on the potential to resist the fungus.

Major Diseases of Economic Importance to the Sugarcane Industry

Sugarcane Smut

- ❑ The impact of Smut disease within the sugarcane industry has been reduced to 2% of sugarcane area island-wide. The reduction of the impact is due mainly to replacing susceptible varieties with newer, tolerant, varieties and proper disease management on farms.
- ❑ Known susceptible varieties such as BJ9186, BJ7230 and BJ82156 have been replaced across the Industry.

Fig. 6: Sugarcane area affected (%) by Smut Disease Year 1977 vs. years 2015 -2018





Testing at SIA-RD's Central Laboratory

The SIA Central Laboratory continued to serve the needs of the Industry by conducting tests across several areas.

☐ Sugar methods:

Polarisation, moisture, reducing sugars, sugar colour (affined and whole raw), dextran, ash, insoluble solids, grain size, and starch.

☐ Wastewater methods (Ministry of Health approved):

pH, total suspended solids (TSS), alkalinity, total dissolved solids (TDS), nitrates (NO_3), phosphates (PO_4), and total nitrogen.

☐ Soil analyses:

pH, nitrogen (N),
Phosphorous (P),
Potassium (K),
Sodium (Na),
Calcium (Ca), Boron (B), organic matter, cation exchange capacity (CEC), texture, electrical conductivity (EC), and salinity.

Testing at SIA-RD's Central Laboratory

❑ **Irrigation water:** pH, electrical conductivity (EC), total dissolved solids (TDS), alkalinity, nitrates (NO_3), phosphates (PO_3), sulphates (SO_4), sodium (Na), Potassium (K), Boron (B), Chloride (Cl), Carbonate (CO_3), Bicarbonate (HCO_3), Calcium (Ca), and Magnesium (Mg).

❑ **Molasses analysis:** polarisation (pol), brix, ash

❑ **Leaf analysis:** nitrogen (N), phosphorous (P), potassium (K), and boron (B).



Molasses: Pol analysis..



Sugar: Grain-size analysis.

Other Information

Sugar Organisations in Jamaica

- ❑ **All Island Jamaica Cane Farmers' Association (AIJCFA)** is the body incorporated by the cane farmers to promote, foster, and encourage the growing of canes.
- ❑ **Cane Expansion Fund (CEF)** is the body charged with managing the revolving loan fund for cane growing and expansion.
- ❑ **Gruppo Campari** is the owner of the Appleton Sugar Factory which is a private large-scale producer of cane and a manufacturer of sugar.
- ❑ **Jamaica Association of Sugar Technologists (JAST)** is an umbrella organization for Jamaica's sugar industry professionals.
- ❑ **Pan Caribbean (PCSC)** is the operator of the Frome and Monymusk Sugar factories; the entity also markets the sugar produced.
- ❑ **Seprod Ltd** is a manufacturing conglomerate and the owner of Golden Grove Sugar Factory. Seprod is a marketing agent for the sugar produced by Golden Grove.
- ❑ **Sugar Industry Authority (SIA)** is a statutory body within the Ministry of Industry, Commerce, Agriculture and Fisheries with powers to regulate the Industry.
- ❑ **Sugar Manufacturers Corporation of Jamaica (SMCJ)** is the umbrella organization of sugar factories.
- ❑ **Sugar Producers' Federation (SPF)** deals with the industrial relations and staff welfare matters of the sugar manufacturers.
- ❑ **Worthy Park Estate Ltd.** is a private, medium-scale producer of cane and a manufacturer and marketing agent of sugar.

SUGAR INDUSTRY AUTHORITY



For further information and queries, direct concerns to:

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