

Table 2. contd.

Hybrid	Mean yield*	No. of trials	Trials**	
			sign)	
			Q5161	or Tx610SR
AKS4 x QL13	113	13	3	
AKS4 x QL14	113	14	5	
AKS4 x QL15	115	6	2	
AKS4 x QL16	109	6	1	
AKS4 x QL17	112	6	1	

* = % Q5161 for AKS4 x QL6-12 (Q5161 = AKS4 x KS19).

= % Tx610SR for AKS4 x QL13-17 (Tx610SR = ACK-60 x TAM422).

** = AKS4 x QL6-12 yields compared with Q5161.

= AKS4 x QL13-17 yields compared with Tx610SR.

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X Sweet Sorghum in the Ord Valley

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Sweet sorghum trials in the irrigated Ord River Valley were continued during the winter of 1977. In addition to four lines introduced from the U.S.A., viz., Rio, Honey, Tracy and Sugar Drip, five lines introduced from Israel in 1976, viz., MN 211, MN 259, Ramada, MN 9, MN 42, also were in the trials. The trial was sown in June 1977, and grain was harvested in November. Sucrose yields and their standard errors are tabulated below.

<u>Cultivar</u>	<u>Sucrose (kg/ha)</u>
MN 211	5660 + 290
MN 259	4600 + 290
Ramada	3690 + 130
MN 9	3640 + 290
MN 42	3340 + 290
Rio	3290 + 150
Tracy	2740 + 150
Honey	2000 + 100
Sugar Drip	1370 + 150

*** BRAZIL ***

X Behavior of Sorghum Lines in Relation to Sugarcane Borer Diatraea saccharalis (Fabricius, 1794)

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Sorghum lines were evaluated for resistance to the sugarcane borer (Diatraea saccharalis) at the Afranio Research Field, Pernambuco in 1976. The infestations of the lines are given in Table 1.

There was significant simple positive correlation between infestation percentage and infestation intensity ($r = 0.86^*$). There was no correlation between infestation percentage and infestation intensity with plant height or with number and external diameter of internodes.

Table 1. Resistance of grain sorghum lines to attacks of sugarcane border *Diatraea saccharalis*.

Line	% of infestation ⁽¹⁾	Line	Infestation Intensity ⁽¹⁾
	$\bar{x} + 0.5$		$\bar{x} + 0.5$
E 57 A	7.44 a	SC 109-12	6.71 a
SC 109-12	6.92 ab	REDLAN B	3.71 ab
SC 112-14	5.96 ab	E 57 A	3.65 ab
REDLAN B	5.94 ab	SC 112-14	3.53 ab
SC 170-6-17	5.51 ab	SC 108-14	3.12 ab
SC 108-14	4.49 ab	SC 120-14	2.83 ab
SC 103-12	4.23 ab	SC 170-6-17	2.57 ab
CMS XS 307	4.23 ab	SC 103-12	2.17 b
SC 120-14	3.94 ab	SC 175-14	2.14 b
IS 4757	3.88 ab	CMS XS 307	2.12 b
CMS XS 904	3.09 ab	CMS XS 308	2.07 b
SC 173-12-6	3.09 ab	IS 4757	2.03 b
CMS XS 308	2.87 ab	CMS XS 905	1.98 b
CMS XS 601	2.87 ab	CMS XS 904	1.94 b
CMS XS 905	2.74 ab	SC 599-6 x SC 134-6	1.84 b
CK 60 B	2.61 ab	SC 173-12-6	1.64 b
TX 2536	2.32 ab	CMS XS 601	1.58 b
PU 932242 B	1.97 ab	CK 60 B	1.58 b
CMS XS 109	1.97 ab	CMS XS 109	1.36 b
SC 599-6-10	1.97 ab	SC 599-6-10	1.36 b
SC 5999-6 x SC 134-6	1.97 ab	TX 2536	1.35 b
ICA NATAIMA	1.97 ab	IS 8361	1.21 b
CMS XS 904	1.97 ab	CMS XS 904	1.21 b
IS 8361	1.47 ab	PU 932242 B	1.07 b
SC 599-6-3	1.47 ab	SC 599-6-3	1.06 b
NK 233	1.47 ab	NK 233	1.06 b
SC 170-6-8	1.47 ab	ICA NATAIMA	1.06 b
SC 175-14	1.07 ab	SC 170-6-8	1.06 b
TX 7078	0.70 b	TX 7078	0.70 b
TX 398 (MARTINI)	0.70 b	TX 398 (MARTINI)	0.70 b

(1) Means not followed by the same letters are significantly different at the 5% of probability.

Stink Bugs Infesting Sorghum Varieties Panicles

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The stink bug, *Thyanta maculata* Fabricius (Hemiptera: Pentatomidae) was collected from developing sorghum panicles of Icapal and Serena varieties. Grain losses caused by this insect appeared serious in the locality of Bebedouro Project Irrigation, Petrolina, Pernambuco, Brazil, during the year 1977/78. In sorghum, the damage was localized to grains in the milk stage and the stink bug infestation was highest in plants with compact type panicles. There are no precise statistics regarding the extent of damage caused by this insect, but we estimate that in highly infested sorghum the damage can be serious. The insect has been found in cotton and bean in the Sao Paulo state, Brazil.

Resistance of Sorghum Varieties to Sorghum Midge, Contarinia sorghicola on Different Planting Dates

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The sorghum midge, *Contarinia sorghicola*, has become a major pest of sorghum in northeast Brazil. The following data were collected at the Serra Talhada Research Station, Pernambuco, Brazil. The resistance of several sorghum varieties planted on different dates was studied in 1977. The plantings were made January 22, 1977; February 12, 1977; March 5, 1977; March 26, 1977 and April 15, 1977. The