

susceptible; 5 - susceptible, 6 - highly susceptible.

4 Screening of Sorghum Entries for Disease Resistance  
Under Semi-Arid Conditions of Brazil

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The selected 46 entries of sorghum were tested under field conditions for disease resistance at Petrolina-PE in 1978. Mosaic, rust and anthracnose were observed in the experimental plot. The incidence of disease was recorded after one month of flowering. The average disease ratings of two replicates of the tested 46 entries are presented in Table 1. Most of the tested entries were found to be resistant or tolerant to mosaic and anthracnose. The cultivars CMS S134 and CMS X S129 appeared to be moderately susceptible to mosaic and anthracnose, respectively. Although a large number of entries were observed to be resistant or moderately resistant to rust, entries CK60B, REDLAN 8, TX398 (MARTIN), CMS X S137, CMS X S114, IPA 1218 and CMS X S312 appeared moderately susceptible while entries IS 8361, SC 056-14 and

NK 233 showed susceptible. Among the tested entries, a number of them were found to be resistant to the diseases that occur in the semi-arid tropics of Brazil.

Table 1. Disease reaction of different entries of sorghum under semi-arid conditions of Brazil, 1978.

Entry	Mosaic	Rust	Anthracnose	
			Leaf	Peduncle
TX 2536	2.0	3.0	2.5	1.0
CK 60 B	1.0	4.0	2.0	1.0
CMS XS 108	1.0	3.5	2.0	1.0
IS 8361	1.0	5.0	2.5	1.5
CMS XS 101-B	1.5	3.5	2.5	1.0
SC 599-6-3	2.0	2.5	2.0	1.0
REDLAN 8	1.0	4.0	2.0	1.0
CMS XS 301	1.5	2.5	1.5	1.0
CMS XS 116	2.0	2.5	1.0	1.0
SC 056-14	1.0	5.0	2.5	1.5
TX 398 (MARTIN)	1.0	4.0	3.0	2.0
NK 233	1.0	5.0	2.5	1.0
SC 423-14	1.5	3.0	3.0	1.0
SC 173-12-6	1.0	3.5	2.0	1.0
CMS XS 134	4.0	2.5	2.0	1.0
CMS XS 135	2.0	2.5	2.0	1.0
CMS XS 310	1.0	2.0	2.0	1.0
SC 103-12	1.0	2.5	2.0	1.0
CMS XS 137	1.5	4.0	2.5	1.5
SC 170-6-8	2.5	3.5	1.0	1.0
CMS XS 117 bk F4	1.0	3.5	3.0	1.5
CMS XS bk F4	1.0	3.0	2.0	1.0
CMS XS bk F4	2.5	3.0	2.5	1.5
CMS XS 120 bk F4	2.0	3.0	2.0	1.0
CMS XS 121 bk F4	1.5	3.0	2.5	1.5
CMS XS 122 bk F4	1.5	2.5	2.0	1.0
CMS XS 123 bk F4	1.5	3.0	2.5	1.5
CMS XS 124 bk F4	1.5	3.0	2.5	1.5
CMS XS 125 bk F4	2.5	3.0	2.0	1.0
CMS XS 126 bk F4	2.5	3.5	2.0	1.5
CMS XS 127 bk F4	3.0	3.0	2.0	1.0
CMS XS 128 bk F4	1.5	3.0	1.5	1.0
CMS XS 129	1.0	3.0	4.0	2.0
CMS XS 130	2.0	3.5	2.5	1.0
CMS XS 131	1.0	3.0	2.0	1.0
CMX XS 132	1.5	3.0	2.0	1.0
CMS XS 133 bk F4	1.5	2.5	2.5	1.0
CMS XS 114	1.0	4.0	2.0	1.0
CMS XS 309	1.5	2.0	1.5	1.0
CMS XS 136	1.0	2.5	2.0	1.0
CMS XS 311	1.5	2.0	2.0	1.0
IPA 1218	1.0	4.0	2.0	1.0
CMS XS 610	1.0	3.0	2.0	1.0
CMS XS 605	1.5	2.0	1.0	1.0
CMS XS 601	1.0	2.5	1.0	1.0
CMS XS 312	1.0	4.0	2.0	1.0

Disease rating: 1 = highly resistant; 2 = resistant; 3 = moderately resistant; 4 = moderately susceptible; 5 = susceptible; 6 = highly susceptible.