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# Effect of storage conditions on soybean seed quality produced by smallholder farmers within two districts of Gauteng, South Africa

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**Table S1:** *Effect of 12% seed moisture content on the rate of deterioration of farm saved seed*

Storage period (hr)	Storage conditions			
	Ambient (control)	T<20°C; RH>50%	T>20°C; RH>50%	T>20°C; RH<50%
0hr	83 <sup>a</sup>	77 <sup>a</sup>	76 <sup>a</sup>	68 <sup>a</sup>
24hr	69 <sup>b</sup>	72 <sup>a</sup>	70 <sup>b</sup>	63 <sup>b</sup>
48hr	41 <sup>c</sup>	71 <sup>a</sup>	67 <sup>b</sup>	60 <sup>b</sup>
72hr	53 <sup>d</sup>	61 <sup>b</sup>	66 <sup>c</sup>	52 <sup>c</sup>

\*Means with the same letters (a-c) do not significantly differ according to the t-test at  $p \leq 0.05$ .

**Table S2:** *Effect of 14% seed moisture content on the rate of deterioration of on farm saved seed*

Storage period (hr)	Storage conditions			
	Ambient (control)	T<20°C; RH>50%	T>20°C; RH>50%	T>20°C; RH<50%
0hr	77 <sup>a</sup>	69 <sup>a</sup>	69 <sup>a</sup>	61 <sup>a</sup>
24hr	63 <sup>b</sup>	65 <sup>a</sup>	64 <sup>a</sup>	58 <sup>b</sup>
48hr	31 <sup>d</sup>	42 <sup>b</sup>	40 <sup>b</sup>	42 <sup>d</sup>
72hr	48 <sup>c</sup>	45 <sup>b</sup>	47 <sup>b</sup>	47 <sup>c</sup>

\*Means with the same letters (a-d) do not significantly differ according to the t-test at  $p \leq 0.05$ .

**Table S3:** *Effect of 16% seed moisture content on the rate of deterioration of farm saved seed*

Storage period (hr)	Storage conditions			
	Ambient (control)	T<20°C; RH>50%	T>20°C; RH>50%	T>20°C; RH<50%
0hr	76 <sup>a</sup>	73 <sup>a</sup>	71 <sup>a</sup>	65 <sup>a</sup>
24hr	65 <sup>b</sup>	69 <sup>a</sup>	66 <sup>a</sup>	60 <sup>b</sup>
48hr	50 <sup>c</sup>	52 <sup>b</sup>	50 <sup>b</sup>	50 <sup>c</sup>
72hr	45 <sup>d</sup>	38 <sup>b</sup>	39 <sup>c</sup>	38 <sup>d</sup>

\*Means with the same letters (a-d) do not significantly differ according to the t-test at  $p \leq 0.05$ .

**Table S4: Effect of 18% seed moisture content on the rate of deterioration of farm saved seed**

Storage period (hr)	Storage conditions			
	Ambient (control)	T<20°C; RH>50%	T>20°C; RH>50%	T>20°C; RH<50%
0hr	67 <sup>a</sup>	60 <sup>a</sup>	65 <sup>a</sup>	57 <sup>a</sup>
24hr	59 <sup>b</sup>	54 <sup>ab</sup>	53 <sup>ab</sup>	52 <sup>a</sup>
48hr	47 <sup>c</sup>	46 <sup>bc</sup>	46 <sup>bc</sup>	42 <sup>c</sup>
72hr	41 <sup>c</sup>	38 <sup>c</sup>	40 <sup>c</sup>	37 <sup>d</sup>

\*Means with the same letters (a-c) do not significantly differ according to the t-test at  $p \leq 0.05$ .

**Table S5: Effect of 20% seed moisture content on the rate of deterioration of farm saved seed**

Storage period (hr)	Storage conditions			
	Ambient (control)	T<20°C; RH>50%	T>20°C; RH>50%	T>20°C; RH<50%
0hr	80 <sup>a</sup>	45 <sup>ab</sup>	60 <sup>a</sup>	53 <sup>a</sup>
24hr	59 <sup>b</sup>	58 <sup>a</sup>	55 <sup>b</sup>	50 <sup>b</sup>
48hr	36 <sup>c</sup>	40 <sup>b</sup>	39 <sup>b</sup>	36 <sup>d</sup>
72hr	40 <sup>c</sup>	41 <sup>b</sup>	41 <sup>b</sup>	35 <sup>c</sup>

\*Means with the same letters (a-c) do not significantly differ according to the t-test at  $p \leq 0.05$ .