

Strychnos cocculoides

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<i>Collection date</i>	October 1999				
<i>Seed source</i>	Kwantanga				
<i>Initial trials (Tanzania)</i>					
<i>Fruit weight</i>	140 g				
<i>Seed weight</i>	0.6 g				
<i>Moisture content before processing</i>	40.6%				
<i>Moisture content after processing</i>	40.6%				
<i>Moisture content (%)</i>	Fruit	Seed coat	Embryo + storage tissue		
	69.0	13.2	36.6		
<i>Initial germination</i>	98%				
<i>Desiccation trial (Tanzania)</i>					
<i>Moisture contents after desiccation (%)</i>	20.7	15.9	12.7	7.8	
<i>Germination after desiccation (%)</i>	86	83	80	78	
<i>Germination of controls (%)</i>	98	98	96	93	
<i>Storage trial (Tanzania)</i>					
<i>Moisture contents (%) before storage</i>	40.6	20.7	15.9	12.7	7.8
<i>Germination (%) after 3 months at -20 °C</i>	30	61	64	63	50
<i>Mc (%) after storage</i>	40.2	19.6	15.5	12.3	7.8
<i>Germination (%) after 6 months at -20 °C</i>	24	69	68	68	*
<i>Mc (%) after storage</i>	28.7	13.1	8.7	8.7	*
<i>Germination (%) after 3 months at 4 °C</i>	69	69	66	64	60
<i>Mc (%) after storage</i>	39	19.4	15.4	12.5	7.9
<i>Germination (%) after 6 months at 4 °C</i>	70	69	68	65	64
<i>Mc (%) after storage</i>	26.9	12.0	11.7	10.9	7.0
<i>Germination (%) after 3 months at 16 °C</i>	78	79	75	76	73
<i>Mc (%) after storage</i>	40.1	19.7	15.3	12.3	7.8
<i>Germination (%) after 6 months at 16 °C</i>	76	78	73	73	78
<i>Mc (%) after storage</i>	26.3	11.5	11.3	11.0	8.0
<i>Initial trials (England)</i>					
<i>Seed measurements ± one SD</i>	Length	Width	Thickness		
	14.1 ± 1.2 mm	10.4 ± 0.9 mm	4.0 ± 0.7 mm		
<i>Seed weight ± one SD</i>	0.382 ± 0.09 g				
<i>Initial germination</i>	43%				
<i>Moisture content (%)</i>	Whole seed	Embryo	Endosperm + testa		
	25.7 ± 7.5	29 ± 14	37 ± 8		
<i>Desiccation trial (England)</i>					
<i>Germination of undried control (%)</i>	59				
<i>Moisture contents after desiccation (%)</i>	22.0	16.6	9.9	9.6	6.2
<i>Germination after desiccation (%)</i>	52-63				38
<i>Additional trials (England)</i>					
<i>Germination temperatures, estimated</i>	Minimum	Optimum	Maximum		
	11.8 °C	23.5 °C	36 °C		

Initial trials (Kenya)						
Moisture content at arrival	24.5 %					
Initial germination	75 %					
Desiccation trial (Kenya)						
Moisture contents after desiccation (%)	10.4	9.6	12.5	13.6	21.9	24
Germination after desiccation (%)	91	90	71	89	84	75
Germination (%) of controls	72	92	82	82	68	32
Storage trial (Kenya)						
Target moisture contents	6		9		12	
Mc (%) after 3 months at 5 °C	5.1		7.6		10.3	
Germination (%) after 3 months at 5 °C	78		-		41	
Mc (%) after 3 months at 15°C	5.3		7.9		10.3	
Germination (%) after 3 months at 15°C	65		71		80	
Mc (%) after 3 months at -20°C	5.5		7.3		10.4	
Germination (%) after 3 months at -20°C	57		79		49	
Comments and conclusions	<p>The seeds seem to be desiccation tolerant, although some viability was lost in the desiccation trial in Tanzania. Storage at 15-16°C seems to give the best results after 3 and 6 months of storage.</p> <p>Please note article by Fletcher and Pritchard in Newsletter no 7.</p>					

* the samples were heavily contaminated with fungi