

Shorea roxburghii

<i>Collecting partner</i>	Suomal Saelim ASEAN Forest Tree Seed Centre Muak Lek District 18180 Saraburi Thailand					
<i>Replicating partner</i>	Jayanthi Nadarajan and Daniel Baskaran Krishnapillay Forest Research Institute Malaysia (FRIM) Kepong 52109 Kuala Lumpur Malaysia					
<i>Collection date</i>	31 March-1 April 2000					
<i>Seed source</i>	Sakaerat environment research station					
<i>Initial trials (Thailand)</i>						
<i>Fruit weight</i>	0.91 g					
<i>Seed weight</i>	0.73 g					
<i>Initial mc (before extraction)</i>	47.23 %					
<i>Initial mc (after extraction)</i>	45.17 %					
<i>Initial trials (Malaysia)</i>						
<i>Date of arrival</i>	24 April 2000					
<i>Pre-sprouted seeds</i>	4%					
<i>Germination</i>	90%					
<i>Component</i>	Fruit	Whole seed	Seed coat	Embryo	Storage tissue/ cotyledons	
<i>Mc (%)</i>	38.9	38.0	21.7	52.3	46.6	
<i>Desiccation trial (Thailand)</i>						
<i>Mc after desiccation (%)</i>	36.03	27.3	25.04	21.23	12.07	
<i>Germination after desiccation (%)</i>	96	91	65	50	2	
<i>Desiccation trial (Malaysia)</i>						
<i>Mc (%)</i>	39.0	31.0	25.4	21.2	9.0	7.3
<i>Germination (%)</i>	88	80	60	27	10	0
<i>Mc of control (%)</i>	36.7	38.7	37.8	34.5	36.3	35.7
<i>Germination of control (%)</i>	90	84	82	78	74	66
<i>Storage trial (Thailand)</i>						
<i>Storage moisture content</i>	As in desiccation trial					
<i>Storage temperatures</i>	5°C, 15°C and ambient					
<i>Storage containers</i>	Cloth, plastic and foil bag					
<i>Most storage conditions resulted in no germination, therefore results below only include treatments with viable seeds after storage</i>						
<i>Mc before storage (%)</i>	36.03		27.3		25.04	
<i>Mc after storage for 3 months at 5 °C in plastic bags (%)</i>	25.33		28.67		23.97	
<i>Germination after storage for 3 months at 5 °C in plastic bags (%)</i>	14		24		16	
<i>Mc after storage for 3 months at 5 °C in foil bags (%)</i>	26.85		27.9		24.57	
<i>Germination after storage for 3 months at 5 °C in foil bags (%)</i>	9		14		6	
<i>Germination after 3 months storage at ambient temperature, initial mc = 27.3, mc after storage = 34.19</i>	2 %					

Storage trial (Malaysia)										
<i>Storage duration (weeks)</i>	2	4	6	8	10	12	14	16	18	20
<i>Mc (%) after storage at 25 °C, initial mc = 33%</i>	31.5	30.8	28.9	29.8	27.9	24.6	18.7	14.2	9.4	6.2
<i>Germination (%)</i>	88	82	76	62	64	48	25	18	5	0
<i>Mc (%) after storage at 25 °C, initial mc = 28%</i>	28.1	27.6	25.9	23.7	19.4	17.8	13.8	10.5	8.4	7.6
<i>Germination (%)</i>	86	84	80	82	78	62	58	44	28	12
<i>Mc (%) after storage at 16 °C, initial mc = 33%</i>	32.4	31.2	29.1	27.0	26.8	22.9	19.2	16.1	11.4	9.7
<i>Germination (%)</i>	90	86	82	74	64	58	42	34	15	0
<i>Mc (%) after storage at 16 °C, initial mc = 28%</i>	27.8	26.7	24.8	22.6	18.4	17.6	15.9	11.5	9.5	8.2
<i>Germination (%)</i>	88	86	82	76	74	60	48	38	26	16
Comments and conclusions	The seeds tolerate partial desiccation, but below 27% moisture content viability was reduced significantly. In the storage trial made in Thailand, 24% of the seeds with an initial moisture content of 27.3%, survived storage at 5°C for 3 months. Whereas almost no seeds survived storage at ambient temperature. In the Malaysian storage trial germination around 50-60% were achieved after 12 weeks at 16°C and 25°C, even though the moisture contents had dropped to 18-25%.									