

***Calophyllum brasiliensis* (1999 collection)**

<i>Collecting partner</i>	William Vasquez, CATIE, 7170 Turrialba Costa Rica			
<i>Replicating partner</i>	Danida Forest Seed Centre Krogerupvej 21, 3050 Humlebaek Denmark			
<i>Collection date</i>	13-14 April 1999			
<i>Dispatch to replicating partner</i>	4 May 1999			
<i>Seed source</i>	Volcan Buenos Aires, Puntarenas (BL096)			
<b><i>Initial trials (Costa Rica)</i></b>				
<i>Fruit weight</i>	3.3 g			
<i>Mc before processing</i>	60%			
<i>Mc after processing</i>	43.5%			
<i>Initial germination</i>	60%			
<b><i>Initial trials (Denmark)</i></b>				
<i>Arrival date</i>	10 May 1999			
<i>Mc at arrival</i>	34%			
<i>Germination</i>	0%			
<i>Seed weight</i>	0.51 g			
<b><i>Desiccation trial (Costa Rica)</i></b>				
<i>Moisture contents after desiccation (%)</i>	26.3 ± 0.6	21.3 ± 0.9	10.5 ± 0.5	4.8 ± 0.6
<i>Germination (%)</i>	<b>37.0 ± 3.8</b>	<b>22.0 ± 4.0</b>	<b>16.0 ± 14.2</b>	<b>4.0 ± 0.0</b>
<i>Germination (%) of control</i>	53.0 ± 15.1	68.0 ± 14.2	64.0 ± 18.8	76.0 ± 8.0
<b><i>Storage trial (Costa Rica)</i></b>				
<b><i>Storage at ambient temperature</i></b>				
<i>Mc before storage (%)</i>	26.3	21.3	10.5	4.8
<i>Mc after 1 month of storage (%)</i>	25.7	18.1	17.7	11.5
<i>Germination after 1 month of storage (%)</i>	<b>27</b>	<b>8</b>	<b>0</b>	<b>0</b>
<i>Mc after 3 months of storage (%)</i>	19.3	28.3	16.4	15.6
<i>Germination after 3 months of storage (%)</i>	<b>49</b>	<b>17</b>	<b>7</b>	<b>0</b>
<i>Mc after 6 months of storage (%)</i>	29.4	18.6	16.1	8.7
<i>Germination after 6 months of storage (%)</i>	<b>19</b>	<b>16</b>	<b>10</b>	<b>0</b>
<b><i>Storage at 15°C</i></b>				
<i>Mc after 1 month of storage (%)</i>	22.0	24.4	18.6	12.9
<i>Germination after 1 month of storage (%)</i>	<b>19</b>	<b>14</b>	<b>11</b>	<b>0</b>
<i>Mc after 3 months of storage (%)</i>	28.4	22.9	22.3	13.7
<i>Germination after 3 months of storage (%)</i>	<b>26</b>	<b>6</b>	<b>4</b>	<b>0</b>
<i>Mc after 6 months of storage (%)</i>	27.8	17.8	11.7	6.2
<i>Germination after 6 months of storage (%)</i>	<b>10</b>	<b>19</b>	<b>5</b>	<b>0</b>
<b><i>Storage at 5 °C</i></b>				
<i>Mc after 1 month of storage (%)</i>	26.4	17.1	17.8	10.0
<i>Germination after 1 month of storage (%)</i>	<b>17</b>	<b>7</b>	<b>0</b>	<b>0</b>
<i>Mc after 3 months of storage (%)</i>	22.4	20.7	6.2	11.1
<i>Germination after 3 months of storage (%)</i>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<i>Mc after 6 months of storage (%)</i>	27.1	20.2	12.1	7.1
<i>Germination after 6 months of storage (%)</i>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b><i>Comments and conclusions</i></b>	The seeds are desiccation sensitive, and apparently also sensitive to 5 °C			

***Calophyllum brasiliensis* (2000 collection)**

<i>Collecting partner</i>	William Vasquez, CATIE, 7170 Turrialba Costa Rica					
<i>Replicating partner</i>	Danida Forest Seed Centre Krogerupvej 21, 3050 Humlebaek Denmark					
<i>Collection date</i>	12 May 2000					
<i>Seed source</i>	Volcan Buenos Aires, Puntarenas (BL096)					
<b><i>Initial trials (Costa Rica)</i></b>						
<i>Mc before processing</i>	56.0 ± 1.3%					
<i>Mc after processing</i>	35.0 ± 1.5%					
<i>Initial germination</i>	86.0 ± 7.6%					
<b><i>Initial trials (Denmark)</i></b>						
<i>Arrival date</i>	22 May 2000 (hand carried)					
<i>Mc at arrival</i>	33.78%					
<i>Germination</i>	95%					
<b><i>Desiccation trial (Costa Rica)</i></b>						
<i>Mc after desiccation (%)</i>	31.8 ± 1.2		29.8 ± 0.8		28.4 ± 0.9	
<i>Germination (%)</i>	<b>91.0 ± 8.9</b>		<b>91.0 ± 3.8</b>		<b>94.0 ± 5.2</b>	
<i>Germination (%) of control</i>					94.0 ± 5.2	
<b><i>Desiccation trial (Denmark)</i></b>						
<i>Mc after desiccation (%)</i>	33.6 ± 1.1		30.9 ± 1.6		27.6 ± 0.7	
<i>Germination (%)</i>	<b>95.0 ± 3.8</b>		<b>91.0 ± 5.0</b>		<b>92.0 ± 3.3</b>	
<i>Germination (%) of control</i>			98.0 ± 2.3		93.6 ± 0.8	
<b><i>Storage trial (Costa Rica)</i></b>						
<i>Mc before storage (%)</i>	31.8	29.8	31.8	29.8	31.8	29.8
<i>Temperature</i>	Ambient		15°C		5°C	
<i>Mc after 1 month of storage (%)</i>	35.9	29.6	32.6	29.1	33.4	30.0
<i>Germination after 1 month of storage (%)</i>	<b>60</b>	<b>81</b>	<b>91</b>	<b>75</b>	<b>26</b>	<b>56</b>
<i>Mc after 3 months of storage (%)</i>	47.1	33.3	34.4	27.1	28.7	28.5
<i>Germination after 3 months of storage (%)</i> <sup>*</sup>	<b>16**</b>	<b>55**</b>	<b>68</b>	<b>46</b>	<b>0</b>	<b>0</b>
<b><i>Storage trial (Denmark)</i></b>	The seeds were germinated after storage for 3 months at 5 and 15°C, but the germination test was stopped after 5 weeks due to massive fungal attack. 15-32% of the seeds appeared fresh when cut. After 6 months of storage the seeds will be desinfected before germination is initiated.					
<b><i>Comments and conclusions</i></b>	The germination period was very long, the first seeds started to germinate after 3-4 weeks, peak germination was between 5-10 weeks and the total period was 5 months. No reductions in viability was found for the tested moisture contents in the desiccation trial, so 28 to 34% mc seems to be a safe interval. The preliminary results of the second trial confirm that the seeds are sensitive to 5°C. After 3 months of storage, best results are achieved for seeds with a moisture content around 30% at ambient temperature and 15°C. The difference in viability between the two moisture contents stored at 15°C indicates that moisture contents below 30% affect storability negatively.					

\* Germination after 7 weeks, test not completed

\*\* Fungi and caterpillars were a problem during germination at ambient temperature