

Supplementary Table 2. LAMP results obtained from DNA extracted from needles.

Sample name	Associated NoF culture	Species	Host	Location	Needle storage	DNA Extraction	Results	Annealing temp (°C)	Amp time (min)
WMF 2	3261	<i>D. septosporum</i>	<i>Pinus contorta</i> var.	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.14	50.15
WMF 2 PjxPI 6	3250	<i>D. septosporum</i>	<i>Pinus contorta</i> var. <i>latifolia</i> × <i>Pinus banksiana</i>	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.52	21.30
WMF 2 Pj 6	3251	<i>D. septosporum</i>	<i>Pinus banksiana</i>	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.50	37.15
WMF 2 PI 7	3252	<i>D. septosporum</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.47	23.00
WMF 2 PI 8	3253	<i>D. septosporum</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.57	20.00
WMF 2 PjxPI 9	3254	<i>D. septosporum</i>	<i>Pinus contorta</i> var. <i>latifolia</i> × <i>Pinus banksiana</i>	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.44	36.15
WMF 2 Pj 9	3256	<i>D. septosporum</i>	<i>Pinus banksiana</i>	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.71	29.45
WMF 2 PI 9	3255	<i>D. septosporum</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.50	49.45
WMF 2 Pj 10	3258	<i>D. septosporum</i>	<i>Pinus banksiana</i>	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.36	54.15
WMF 2 PI 10	3257	<i>D. septosporum</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.74	22.15
WMF 3	3263	<i>D. septosporum</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.67	19.15
WMF 3 PjxPI 11		<i>D. septosporum</i>	<i>Pinus contorta</i> var. <i>latifolia</i> ×	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.58	30.00

Sample name	Associated NoF culture	Species	Host	Location	Needle storage	DNA Extraction	Results	Annealing temp (°C)	Amp time (min)
WMF 3 PI 13	3259	<i>D. septosporum</i>	<i>Pinus banksiana</i> <i>Pinus contorta</i> var.	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.42	29.15
WMR 2	3264	<i>D. septosporum</i>	<i>Pinus contorta</i> var.	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.54	21.45
WMR 3	3265	<i>D. septosporum</i>	<i>Pinus contorta</i> var.	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.61	24.00
WMR 4	3266	<i>D. septosporum</i>	<i>Pinus contorta</i> var.	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.60	21.00
WMR 5	3267	<i>D. septosporum</i>	<i>Pinus contorta</i> var.	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.70	32.15
WMR 6	3268	<i>D. septosporum</i>	<i>Pinus contorta</i> var.	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.63	23.30
WMR 7	3269	<i>D. septosporum</i>	<i>Pinus contorta</i> var.	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.57	26.00
WMR 8	3270	<i>D. septosporum</i>	<i>Pinus contorta</i> var.	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.73	28.00
WMR 9	3271	<i>D. septosporum</i>	<i>Pinus contorta</i> var.	Whitecourt Mountain, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.66	24.30
HERB		<i>D. septosporum</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Alberta Tree Improvement and Seed Centre (ATISC) near Smoky Lake, AB, Canada	dried and stored at -20°C for 8 years	DNAzol®	Positive	88.34	21.15
Doth15_1_2		<i>D. septosporum</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Whitecourt Mountain, AB, Canada	dried and stored at -20°C for 5 years	DNAzol®	Positive	88.63	22.15

Sample name	Associated NoF culture	Species	Host	Location	Needle storage	DNA Extraction	Results	Annealing temp (°C)	Amp time (min)
Doth15-2-1		<i>D. septosporum</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Blue Ridge, AB, Canada	dried and stored at -20°C for 5 years	DNAzol®	Positive	88.65	21.45
Doth15_2_2		<i>D. septosporum</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Blue Ridge, AB, Canada	dried and stored at -20°C for 5 years	DNAzol®	Positive	88.60	22.00
Doth15_4_1		<i>D. septosporum</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Alberta Tree Improvement and Seed Centre (ATISC) near Smoky Lake, AB, Canada	dried and stored at -20°C for 5 years	DNAzol®	Positive	88.44	33.45
ATISC16-7		<i>Dothistroma septosporum</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Alberta Tree Improvement and Seed Centre (ATISC) near Smoky Lake, AB, Canada	fresh and stored at 4°C	DNAzol®	Positive	88.52	35.30
ATISC16-4		<i>Lecanosticta acicola</i>	<i>Pinus contorta</i> var. <i>latifolia</i> × <i>Pinus banksiana</i>	Alberta Tree Improvement and Seed Centre (ATISC) near Smoky Lake, AB, Canada	fresh and stored at 4°C	DNAzol®	Negative	-	-
ATISC16-9		<i>Lophodermium seditiosum</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Alberta Tree Improvement and Seed Centre (ATISC) near Smoky Lake, AB, Canada	fresh and stored at 4°C	DNAzol®	Negative	-	-
Ed		<i>Elytroderma deformans</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Hinton, AB, Canada	dried and stored at -20°C for 5 years	DNAzol®	Negative	-	-

Sample name	Associated NoF culture	Species	Host	Location	Needle storage	DNA Extraction	Results	Annealing temp (°C)	Amp time (min)
Da		<i>Davisomycella ampla</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Hinton, Canada	AB, dried and stored at -20°C for 5 years	DNAzol®	Negative	-	-
Lc		<i>Lophodemella concolor</i>	<i>Pinus contorta</i> var. <i>latifolia</i>	Hinton, Canada	AB, dried and stored at -20°C for 5 years	DNAzol®	Negative	-	-