

## Supplementary material

### **Novel amplified fragment length polymorphism (AFLP) markers for typing medically relevant *Fusarium* and allied fusarioid genera.**

Ruan Campos Monteiro<sup>1</sup>, Cecília Zorat Yu<sup>2</sup>, Somayeh Dolatabadi<sup>3</sup>, Ferry Hagen<sup>4,5,6</sup>, Marcelo Sandoval-Denis<sup>4</sup>, Pedro W. Crous<sup>4</sup>, Matthew C. Fisher<sup>7</sup>, Sarah Santos Gonçalves<sup>8</sup>, Zoilo Pires de Camargo<sup>1</sup>, Ana Luisa Hofling-Lima<sup>2</sup>, and Anderson Messias Rodrigues<sup>1,9\*</sup>

<sup>1</sup> Laboratory of Emerging Fungal Pathogens, Department of Microbiology, Immunology, and Parasitology, Discipline of Cellular Biology, Federal University of São Paulo (UNIFESP), São Paulo 04023062, Brazil.

<sup>2</sup> Laboratory of Ophthalmology (LOFT), Department of Ophthalmology and Visual Sciences, Escola Paulista de Medicina (EPM), Federal University of São Paulo (UNIFESP), Sao Paulo 04023-062, Brazil.

<sup>3</sup> Department of Biology, Hakim Sabzevari University, Sabzevar, Iran.

<sup>4</sup> Department of Medical Mycology, Westerdijk Fungal Biodiversity Institute, Uppsalalaan 8, 3584 CT Utrecht, The Netherlands.

<sup>5</sup> Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam, Sciencepark 904, 1098 XH Amsterdam, The Netherlands.

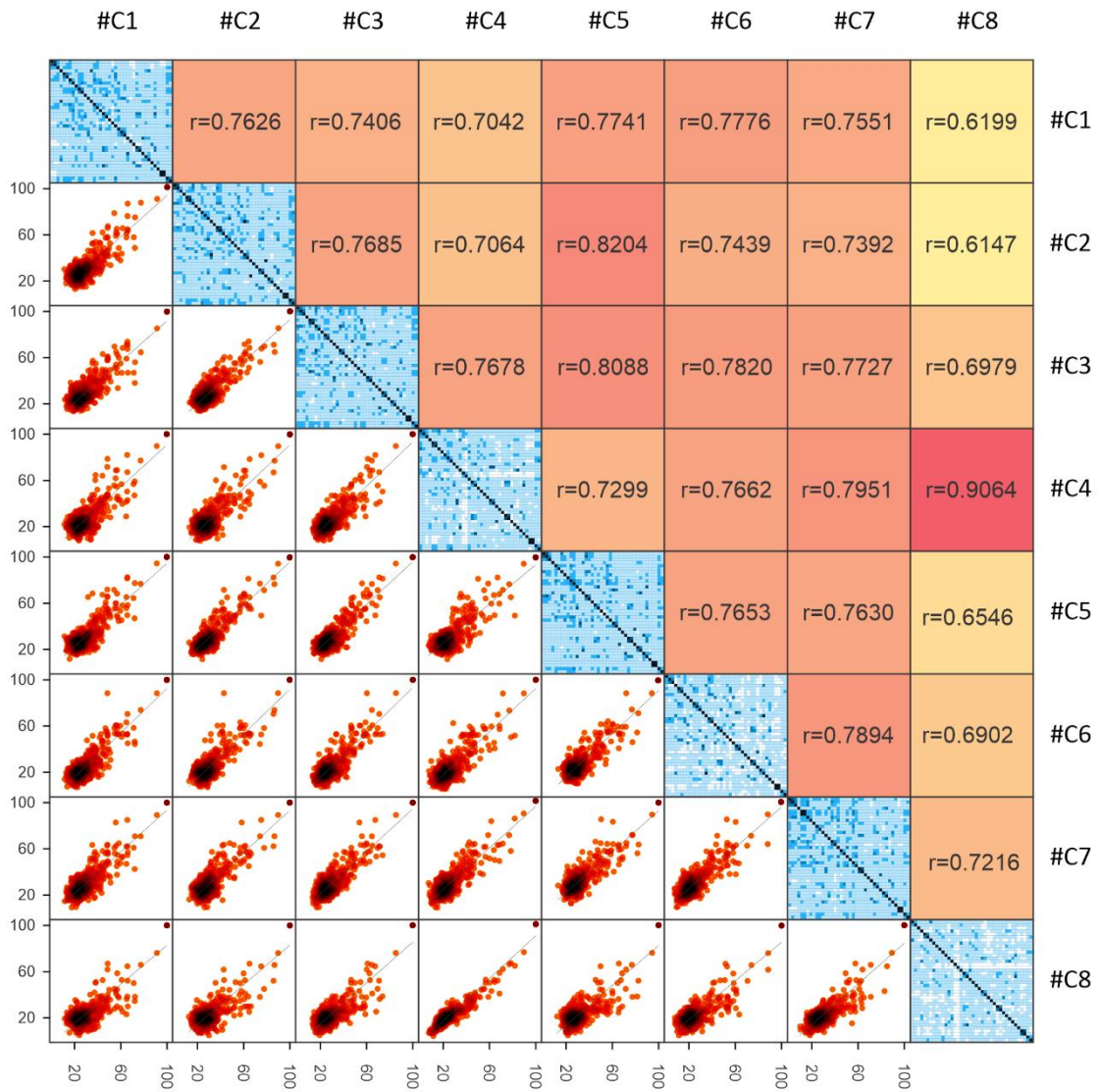
<sup>6</sup> Department of Medical Microbiology, University Medical Center Utrecht, Heidelberglaan 100, 3584 CX Utrecht, The Netherlands.

<sup>7</sup> Medical Research Council Center for Global Infectious Disease Analysis, Department of Infectious Disease Epidemiology, School of Public Health, Imperial College London, London W2 1PG, UK.

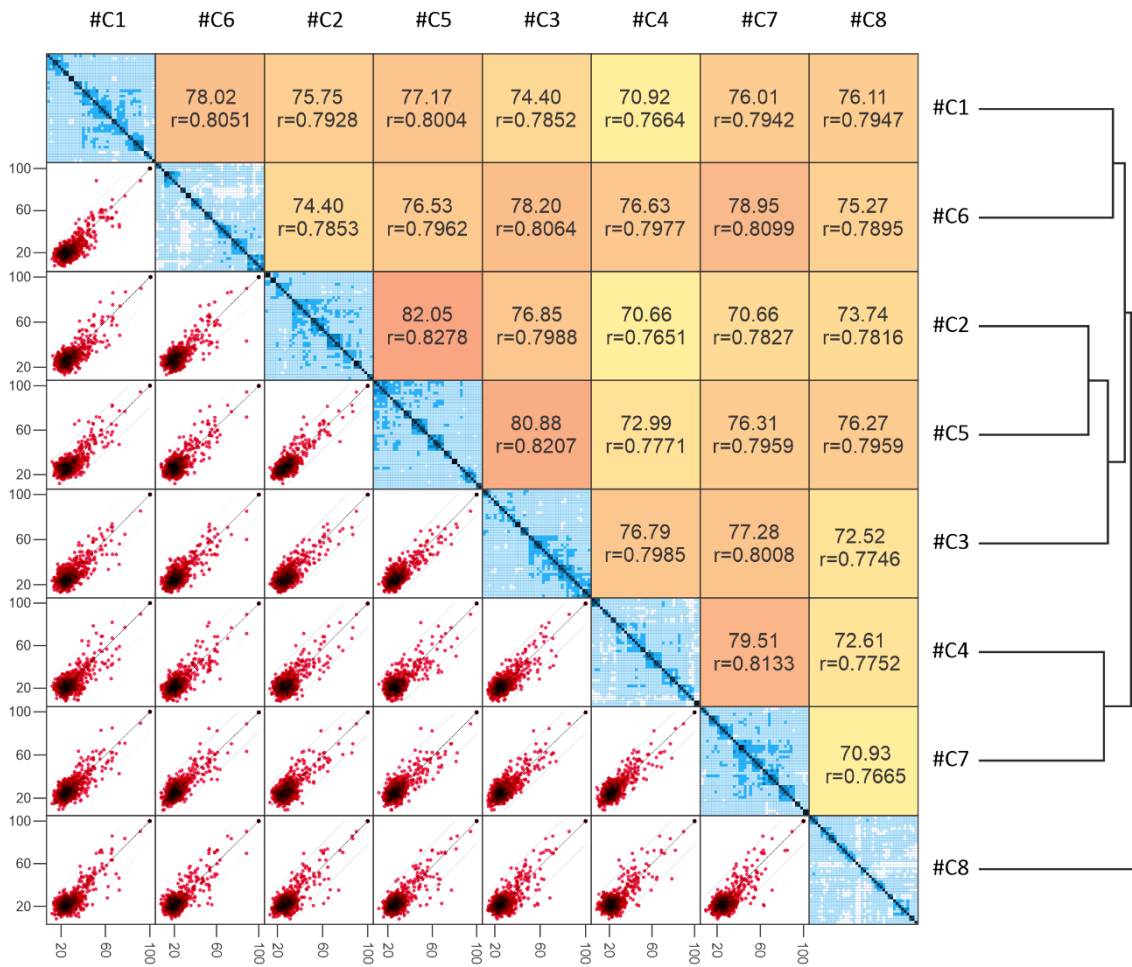
<sup>8</sup> Infectious Diseases Postgraduate Program, Center for Research in Medical Mycology, Federal University of Espírito Santo (UFES), Espírito Santo, 29043900, Brazil.

<sup>9</sup> National Institute of Science and Technology in Human Pathogenic Fungi, Brazil.

\*Correspondence: amrodrigues@unifesp.br or amrodrigues.amr@gmail.com; Tel.: +55-1155764551 (ext. 1540).



**Figure S1.** Similarity values correlation computed with the Mantel Test. The diagonal has plotted similarity matrices. Squares on the upper side of the diagonal show correlation values ( $r$ ). Those on the lower side show corresponding correlation plots.



**Figure S2.** Experimental congruence between AFLP markers. The diagonal has plotted similarity matrices. Squares above the diagonal show correlation values (r). The squares below show correlation plots. The correlation cladogram is at right.

**Table S1.** Diversity indices computed from AFLP fingerprinting.

	<b>C1</b>	<b>C2</b>	<b>C3</b>	<b>C4</b>	<b>C5</b>	<b>C6</b>	<b>C7</b>	<b>C8</b>	<b>Overall</b>
Entries	1,560	1,560	1,560	1,560	1,560	1,560	1,560	1,560	12,480
Minimum	11.89	13.35	13.96	8.11	12.03	7.36	9.5	5.11	5.11
Maximum	91.45	89.99	85.49	89.76	94.44	88.45	89.31	76.21	94.44
Median	25.7	27.75	26.06	22.47	27.345	20.865	26.35	20.25	24.73
Arithmetic average	28.0214	29.2075	28.2864	24.568	29.2421	23.0656	28.3768	21.5272	26.5369
Variance	89.7207	85.4548	84.8855	94.4518	93.099	96.4818	92.894	57.5651	94.7865
Standard deviation	9.4721	9.2442	9.2133	9.7186	9.6488	9.8225	9.6382	7.5872	9.7358
Standard error	0.2398	0.234	0.2333	0.2461	0.2443	0.2487	0.244	0.1921	0.0871

**Table S2.** Comparison results from Mantel test.

<b>Summary</b>	<b>Mantel statistic r:</b>	<b>p-value</b>	<b>Congruence</b>	<b>Correlation</b>
C1 x C2	0.76260	0.001	75.75	0.7928
C1 x C3	0.74060	0.001	74.40	0.7852
C1 x C4	0.70420	0.001	70.92	0.7664
C1 x C5	0.77410	0.001	77.17	0.8004
C1 x C6	0.77760	0.001	78.02	0.8051
C1 x C7	0.75510	0.001	76.01	0.7942
C1 x C8	0.61990	0.001	76.11	0.7947
C1 x Sequencing	-0.60290	0.001		
C2 x C3	0.76850	0.001	76.85	0.7988
C2 x C4	0.70640	0.001	70.66	0.7827
C2 x C5	0.82040	0.001	82.05	0.8278
C2 x C6	0.74390	0.001	74.40	0.7853
C2 x C7	0.73920	0.001	73.95	0.7651
C2 x C8	0.61470	0.001	73.74	0.7816
C2 x Sequencing	-0.55680	0.001		
C3 x C4	0.76780	0.001	76.79	0.7985
C3 x C5	0.80880	0.001	80.88	0.8207
C3 x C6	0.78200	0.001	78.20	0.8064
C3 x C7	0.77270	0.001	77.28	0.8008
C3 x C8	0.69790	0.001	72.52	0.7746
C3 x Sequencing	-0.49340	0.001		
C4 x C5	0.72990	0.001	72.99	0.7771
C4 x C6	0.76620	0.001	76.63	0.7977
C4 x C7	0.79510	0.001	79.51	0.8133
C4 x C8	0.90640	0.001	72.61	0.7752
C4 x Sequencing	-0.41710	0.001		
C5 x C6	0.76530	0.001	76.53	0.7962
C5 x C7	0.76300	0.001	76.31	0.7959
C5 x C8	0.65460	0.001	76.27	0.7959
C5 x Sequencing	-0.47550	0.001		
C6 x C7	0.78940	0.001	78.95	0.8099
C6 x C8	0.69020	0.001	75.27	0.7895
C6 x Sequencing	-0.49180	0.001		
C7 x C8	0.72160	0.001	70.93	0.7665
C7 x Sequencing	-0.52060	0.001		
C8 x Sequencing	-0.33750	0.001		

**Table S3.** Pearson correlation for experimental congruence.

<b>Summary</b>	<b>Pearson correlation test</b>	<b><i>p</i>-value</b>
C1xC2	0.90086	0.00
C1xC3	0.89626	0.00
C1xC4	0.88199	0.00
C1xC5	0.90417	0.00
C1xC6	0.91119	0.00
C1xC7	0.90016	0.00
C1xC8	0.90030	0.00
C2xC3	0.90705	0.00
C2xC4	0.88200	0.00
C2xC5	0.92513	0.00
C2xC6	0.89756	0.00
C2xC7	0.89240	0.00
C2xC8	0.89122	0.00
C3xC4	0.97570	0.00
C3xC5	0.92086	0.00
C3xC6	0.91367	0.00
C3xC7	0.90691	0.00
C3xC8	0.88710	0.00
C4xC5	0.88823	0.00
C4xC6	0.90730	0.00
C4xC7	0.91593	0.00
C4xC8	0.88732	0.00
C5xC6	0.90322	0.00
C5xC7	0.89976	0.00
C5xC8	0.89934	0.00
C6xC7	0.91397	0.00
C6xC8	0.87759	0.00
C7xC8	0.87759	0.00

**Table S4.** Diversity indices for each species included in the study.

#1 EcoRI-GA/MseI-AG								
Species	Scored bands	<i>H</i>	<i>PIC</i>	<i>E</i>	<i>H<sub>avp</sub></i>	<i>MI</i>	<i>D</i>	<i>R<sub>p</sub></i>
<i>Neocosmospora</i>	90	0.48216	0.36592	36.50000	0.00021	0.00752	0.83563	44.38462
<i>N. petroliphila</i>	72	0.37033	0.30176	54.33333	0.00171	0.09315	0.43140	24.00000
<i>N. keratoplastica</i>	55	0.49993	0.37496	27.83333	0.00151	0.04217	0.74466	29.66667
<i>N. falciformis</i>	68	0.49448	0.37223	37.57143	0.00104	0.03903	0.69524	28.85714
<i>N. solani</i>	68	0.49653	0.37326	36.83333	0.00122	0.04483	0.70721	28.33333
<i>N. suttoniana</i>	57	0.44733	0.34728	37.75000	0.00196	0.07406	0.56237	25.50000
<i>Fusarium</i>	83	0.48618	0.36799	48.40000	0.00059	0.02835	0.66025	40.00000
FOSC	89	0.47390	0.36161	54.66667	0.00089	0.04851	0.62316	40.00000
FOSC-VII	64	0.35330	0.29089	49.33333	0.00184	0.09078	0.40674	20.66667
FFSC	69	0.43951	0.34292	46.50000	0.00159	0.07405	0.54664	42.00000
FFSC-Af	49	0.18326	0.16647	44.00000	0.00187	0.08228	0.19461	10.00000
FFSC-As	52	0.07396	0.07123	50.00000	0.00071	0.03556	0.07580	4.00000
<i>Bisifusarium</i>	64	0.48779	0.36882	37.00000	0.00191	0.07050	0.66673	38.00000
<i>Bisifusarium</i> clade II	54	0.42676	0.33570	37.33333	0.00263	0.09835	0.52335	24.66667
Overall	93	0.49097	0.37044	40.25000	0.00013	0.00531	0.81275	54.60000
#2 EcoRI-AT/MseI-TA								
Species	Scored bands	<i>H</i>	<i>PIC</i>	<i>E</i>	<i>H<sub>avp</sub></i>	<i>MI</i>	<i>D</i>	<i>R<sub>p</sub></i>
<i>Neocosmospora</i>	88	0.49459	0.37228	39.42308	0.00022	0.00852	0.79941	48.84615
<i>N. petroliphila</i>	57	0.30423	0.25795	46.33333	0.00178	0.08243	0.34014	15.33333
<i>N. keratoplastica</i>	55	0.48942	0.36965	31.50000	0.00148	0.04672	0.67273	23.00000
<i>N. falciformis</i>	74	0.49963	0.37482	38.00000	0.00096	0.03665	0.73679	30.57143
<i>N. solani</i>	69	0.44282	0.34478	46.16667	0.00107	0.04938	0.55287	31.00000
<i>N. suttoniana</i>	69	0.48086	0.36525	41.25000	0.00174	0.07187	0.64348	36.50000
<i>Fusarium</i>	77	0.48865	0.36926	44.30000	0.00063	0.02811	0.66932	42.60000
FOSC	76	0.49134	0.37063	43.00000	0.00108	0.04633	0.68042	40.00000
FOSC-VII	51	0.43060	0.33789	35.00000	0.00281	0.09850	0.53044	22.00000
FFSC	68	0.39271	0.31560	49.75000	0.00144	0.07183	0.46546	33.50000
FFSC-Af	51	0.11073	0.10460	48.00000	0.00109	0.05211	0.11474	6.00000
FFSC-As	54	0.08831	0.08441	51.50000	0.00082	0.04211	0.09086	5.00000
<i>Bisifusarium</i>	69	0.49787	0.37393	36.75000	0.00180	0.06629	0.71723	38.50000
<i>Bisifusarium</i> clade II	58	0.48705	0.36844	33.66667	0.00280	0.09424	0.66447	29.33333
Overall	93	0.49097	0.37044	40.25000	0.00013	0.00531	0.81275	54.60000
#3 EcoRI-AA/MseI-TT								
Species	Scored bands	<i>H</i>	<i>PIC</i>	<i>E</i>	<i>H<sub>avp</sub></i>	<i>MI</i>	<i>D</i>	<i>R<sub>p</sub></i>
<i>Neocosmospora</i>	78	0.48189	0.36578	31.57692	0.00024	0.00750	0.83623	40.07692
<i>N. petroliphila</i>	51	0.35986	0.29511	39.00000	0.00235	0.09173	0.41641	16.66667
<i>N. keratoplastica</i>	48	0.49653	0.37326	26.00000	0.00172	0.04483	0.70746	18.66667
<i>N. falciformis</i>	62	0.48127	0.36546	37.00000	0.00111	0.04103	0.64442	26.57143
<i>N. solani</i>	49	0.49250	0.37122	27.50000	0.00168	0.04607	0.68587	23.00000
<i>N. suttoniana</i>	55	0.46281	0.35571	35.00000	0.00210	0.07363	0.59610	26.00000
<i>Fusarium</i>	75	0.49909	0.37454	35.90000	0.00067	0.02389	0.77121	36.60000
FOSC	75	0.49778	0.37389	40.00000	0.00111	0.04425	0.71611	40.66667
FOSC-VII	56	0.44444	0.34568	37.33333	0.00265	0.09877	0.55689	22.66667
FFSC	54	0.47925	0.36441	32.50000	0.00222	0.07211	0.63889	33.00000
FFSC-Af	38	0.28359	0.24338	31.50000	0.00373	0.11754	0.31474	13.00000
FFSC-As	36	0.12924	0.12089	33.50000	0.00180	0.06013	0.13498	5.00000
<i>Bisifusarium</i>	65	0.45950	0.35393	41.75000	0.00177	0.07378	0.58833	33.50000
<i>Bisifusarium</i> clade II	64	0.42573	0.33511	44.33333	0.00222	0.09830	0.52127	26.66667
Overall	85	0.47953	0.36455	33.90000	0.00014	0.00478	0.84101	46.50000

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**#4 EcoRI-GA/MseI-AA**

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Species	Scored bands	<i>H</i>	<i>PIC</i>	<i>E</i>	<i>H<sub>avp</sub></i>	<i>MI</i>	<i>D</i>	<i>R<sub>p</sub></i>
<i>Neocosmospora</i>	84	0.46176	0.35515	30.38462	0.00021	0.00642	0.86926	43.84615
<i>N. petroliophila</i>	48	0.36073	0.29566	36.66667	0.00251	0.09185	0.41774	14.00000
<i>N. keratoplastica</i>	44	0.49653	0.37326	20.16667	0.00188	0.03793	0.79087	20.33333
<i>N. falciformis</i>	56	0.49917	0.37458	29.14286	0.00127	0.03711	0.72981	25.71429
<i>N. solani</i>	69	0.49211	0.37102	38.83333	0.00119	0.04616	0.68385	33.66667
<i>N. suttoniana</i>	56	0.49219	0.37106	31.50000	0.00220	0.06921	0.68470	26.00000
<i>Fusarium</i>	72	0.49986	0.37493	35.40000	0.00069	0.02458	0.75861	44.00000
FOSC	67	0.48886	0.36937	38.50000	0.00122	0.04682	0.67041	35.66667
FOSC-VII	46	0.42901	0.33698	31.66667	0.00311	0.09844	0.52766	17.33333
FFSC	57	0.48611	0.36796	33.25000	0.00213	0.07089	0.66079	40.50000
FFSC-Af	42	0.19133	0.17302	37.50000	0.00228	0.08541	0.20396	9.00000
FFSC-As	31	0.09209	0.08785	29.50000	0.00149	0.04382	0.09519	3.00000
<i>Bisifusarium</i>	58	0.49550	0.37274	31.75000	0.00214	0.06781	0.70141	33.50000
<i>Bisifusarium</i> clade II	53	0.48337	0.36655	31.33333	0.00304	0.09525	0.65202	26.00000
Overall	84	0.46875	0.35889	31.50000	0.00014	0.00439	0.85944	48.60000

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**#5 EcoRI-AT/MseI-AG**

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Species	Scored bands	<i>H</i>	<i>PIC</i>	<i>E</i>	<i>H<sub>avp</sub></i>	<i>MI</i>	<i>D</i>	<i>R<sub>p</sub></i>
<i>Neocosmospora</i>	88	0.49858	0.37429	41.65385	0.00022	0.00908	0.77606	49.15385
<i>N. petroliophila</i>	63	0.30839	0.26084	51.00000	0.00163	0.08322	0.34549	16.66667
<i>N. keratoplastica</i>	65	0.46713	0.35802	40.83333	0.00120	0.04891	0.60596	28.33333
<i>N. falciformis</i>	72	0.48863	0.36925	41.42857	0.00097	0.04017	0.66940	34.57143
<i>N. solani</i>	64	0.47253	0.36089	39.50000	0.00123	0.04861	0.61970	30.33333
<i>N. suttoniana</i>	63	0.45688	0.35251	40.75000	0.00181	0.07388	0.58253	31.50000
<i>Fusarium</i>	76	0.49994	0.37497	37.60000	0.00066	0.02473	0.75556	37.60000
FOSC	72	0.49330	0.37163	40.16667	0.00114	0.04587	0.68935	34.33333
FOSC-VII	50	0.37164	0.30258	37.66667	0.00248	0.09332	0.43374	16.66667
FFSC	57	0.45014	0.34883	37.50000	0.00197	0.07404	0.56817	34.00000
FFSC-Af	40	0.18000	0.16380	36.00000	0.00225	0.08100	0.19114	8.00000
FFSC-As	40	0.04875	0.04756	39.00000	0.00061	0.02377	0.04968	2.00000
<i>Bisifusarium</i>	70	0.48140	0.36553	41.75000	0.00172	0.07178	0.64514	38.50000
<i>Bisifusarium</i> clade II	62	0.41207	0.32717	44.00000	0.00222	0.09748	0.49747	24.66667
Overall	90	0.49494	0.37246	40.47500	0.00014	0.00556	0.79782	51.95000

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**#6 EcoRI-GA/MseI-TT**

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Species	Scored bands	<i>H</i>	<i>PIC</i>	<i>E</i>	<i>H<sub>avp</sub></i>	<i>MI</i>	<i>D</i>	<i>R<sub>p</sub></i>
<i>Neocosmospora</i>	81	0.43176	0.33855	25.53846	0.00021	0.00524	0.90070	39.69231
<i>N. petroliophila</i>	52	0.36851	0.30061	39.33333	0.00236	0.09291	0.42903	16.66667
<i>N. keratoplastica</i>	42	0.49950	0.37475	20.33333	0.00198	0.04030	0.76662	19.33333
<i>N. falciformis</i>	55	0.49376	0.37186	24.42857	0.00128	0.03133	0.80337	27.14286
<i>N. solani</i>	48	0.49882	0.37441	25.16667	0.00173	0.04359	0.72597	19.66667
<i>N. suttoniana</i>	43	0.47296	0.36111	26.50000	0.00275	0.07287	0.62158	21.00000
<i>Fusarium</i>	62	0.49958	0.37479	30.10000	0.00081	0.02425	0.76471	33.40000
FOSC	57	0.49383	0.37189	31.66667	0.00144	0.04572	0.69208	27.33333
FOSC-VII	42	0.37894	0.30714	31.33333	0.00301	0.09423	0.44495	12.00000
FFSC	51	0.46996	0.35953	31.75000	0.00230	0.07314	0.61359	32.50000
FFSC-Af	43	0.24013	0.21130	37.00000	0.00279	0.10331	0.26101	12.00000
FFSC-As	28	0.10140	0.09626	26.50000	0.00181	0.04799	0.10519	3.00000
<i>Bisifusarium</i>	47	0.49909	0.37455	24.50000	0.00265	0.06504	0.72961	25.00000
<i>Bisifusarium</i> clade II	34	0.44444	0.34568	22.66667	0.00436	0.09877	0.55776	17.33333
Overall	78	0.44760	0.34743	26.37500	0.00014	0.00378	0.88573	42.35000



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**#7 EcoRI-TA/MseI-AA**

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Species	Scored bands	<i>H</i>	<i>PIC</i>	<i>E</i>	<i>H<sub>avp</sub></i>	<i>MI</i>	<i>D</i>	<i>R<sub>p</sub></i>
<i>Neocosmospora</i>	72	0.46490	0.35683	26.46154	0.00025	0.00657	0.86505	33.84615
<i>N. petroliophila</i>	38	0.30055	0.25539	31.00000	0.00264	0.08173	0.33582	10.66667
<i>N. keratoplastica</i>	40	0.48747	0.36865	23.16667	0.00203	0.04705	0.66559	17.66667
<i>N. falciformis</i>	56	0.50000	0.37500	28.00000	0.00128	0.03571	0.75064	26.57143
<i>N. solani</i>	44	0.48964	0.36977	25.16667	0.00185	0.04668	0.67378	20.33333
<i>N. suttoniana</i>	42	0.45210	0.34990	27.50000	0.00269	0.07400	0.57264	18.00000
<i>Fusarium</i>	71	0.49643	0.37321	32.50000	0.00070	0.02272	0.79082	37.40000
FOSC	62	0.49235	0.37115	34.83333	0.00132	0.04610	0.68501	28.33333
FOSC-VII	40	0.36653	0.29936	30.33333	0.00305	0.09265	0.42647	12.00000
FFSC	52	0.09209	0.08785	29.50000	0.00149	0.04382	0.09519	3.00000
FFSC-Af	38	0.20880	0.18700	33.50000	0.00275	0.09203	0.22421	9.00000
FFSC-As	31	0.09209	0.08785	29.50000	0.00149	0.04382	0.09519	3.00000
<i>Bisifusarium</i>	56	0.48848	0.36917	32.25000	0.00218	0.07033	0.66944	32.50000
<i>Bisifusarium</i> clade II	51	0.44444	0.34568	34.00000	0.00290	0.09877	0.55702	24.00000
Overall	78	0.46324	0.35594	28.42500	0.00015	0.00422	0.86727	40.15000

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**#8 EcoRI-TA/MseI-AG**

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Species	Scored bands	<i>H</i>	<i>PIC</i>	<i>E</i>	<i>H<sub>avp</sub></i>	<i>MI</i>	<i>D</i>	<i>R<sub>p</sub></i>
<i>Neocosmospora</i>	71	0.45816	0.35320	25.23077	0.00025	0.00626	0.87384	38.15385
<i>N. petroliophila</i>	32	0.23416	0.20674	27.66667	0.00244	0.06748	0.25373	6.66667
<i>N. keratoplastica</i>	41	0.49600	0.37299	18.66667	0.00202	0.03764	0.79373	21.33333
<i>N. falciformis</i>	50	0.49998	0.37499	25.14286	0.00143	0.03592	0.74785	19.71429
<i>N. solani</i>	47	0.49749	0.37374	25.16667	0.00176	0.04440	0.71417	21.00000
<i>N. suttoniana</i>	52	0.44656	0.34685	34.50000	0.00215	0.07407	0.56090	26.00000
<i>Fusarium</i>	63	0.49901	0.37451	30.10000	0.00079	0.02384	0.77213	35.40000
FOSC	53	0.49359	0.37178	29.50000	0.00155	0.04579	0.69097	24.33333
FOSC-VII	34	0.38927	0.31351	25.00000	0.00382	0.09541	0.46127	11.33333
FFSC	50	0.44220	0.34443	33.50000	0.00221	0.07407	0.55221	30.00000
FFSC-Af	38	0.12292	0.11537	35.50000	0.00162	0.05742	0.12807	5.00000
FFSC-As	33	0.08678	0.08301	31.50000	0.00131	0.04142	0.08951	3.00000
<i>Bisifusarium</i>	56	0.49601	0.37300	30.50000	0.00221	0.06754	0.70448	32.00000
<i>Bisifusarium</i> clade II	44	0.45409	0.35099	28.66667	0.00344	0.09861	0.57726	19.33333
Overall	77	0.45500	0.35149	26.95000	0.00015	0.00398	0.87757	42.30000

*D*=discriminating power; *E*=effective multiplex ratio; *H*=expected heterozygosity; *H<sub>avp</sub>*=mean heterozygosity; *MI*=marker index; *PIC*=polymorphism information content; *R<sub>p</sub>*=resolving power.

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