

Supplementary Material

Table S1. Culturable fungi isolated from soil samples from the Namaqua National Park, South Africa.

Name of fungal species	GenBank#	PPRI#	Dry	Flr	Tot	RA
<i>Acidomyces acidophilus</i>	<u>JQ172742</u>	17687	0	1	1	0.3%
<i>Alternaria alternata</i>	<u>AF347031</u>	17622	5	13	18	6.1%
<i>Alternaria eureka</i>	<u>NR136016</u>	17624	0	2	2	0.7%
<i>Alternaria tenuissima</i>	<u>AF347032</u>	15948	1	0	1	0.3%
<i>Aspergillus aureolus</i>	<u>KY808743</u>	17748	8	2	10	3.4%
<i>Aspergillus crustosus</i>	<u>NR135366</u>	15938	1	0	1	0.3%
<i>Aspergillus fischeri</i>	<u>EF669936</u>	13093	0	2	2	0.7%
<i>Aspergillus flavus</i>	<u>AF027863</u>	17773	0	2	2	0.7%
<i>Aspergillus foeniculicola</i>	<u>NR137497</u>	15953	1	0	1	0.3%
<i>Aspergillus fumigatiaffinis</i>	<u>HF545316</u>	13089	0	4	4	1.4%
<i>Aspergillus halophilicus</i>	<u>NR137452</u>	17684	0	1	1	0.3%
<i>Aspergillus neoniveus</i>	<u>NR137474</u>	13094	0	9	9	3.0%
<i>Aspergillus parasiticus</i>	<u>NR121219</u>	15918	11	0	11	3.7%
<i>Aspergillus ustus</i>	<u>EF652455</u>	17765	0	1	1	0.3%
<i>Bartalinia pondoensis</i>	<u>KU0599481</u>	17678	0	1	1	0.3%
<i>Chaetomium carinthiacum</i>	<u>HM365265</u>	15926	3	0	3	1.0%
<i>Chaetosphaeronema hispidulum</i>	<u>EU754046</u>	17739	0	6	6	2.0%
<i>Cladosporium cladosporioides</i>	<u>NR119839</u>	17638	22	7	29	9.8%
<i>Cladosporium herbarum</i>	<u>NR119656</u>	15966	4	0	4	1.4%
<i>Cladosporium macrocarpum</i>	<u>NR119657</u>	15960	2	0	2	0.7%
<i>Cladosporium oxysporum</i>	<u>HM148118</u>	15956	2	2	4	1.4%
<i>Colletotrichum dematium</i>	<u>NR111453</u>	17674	0	2	2	0.7%
<i>Coprinopsis erythrocephala</i>	<u>FN396125</u>	17636	0	1	1	0.3%
<i>Curvularia spicifera</i>	<u>KJ922377</u>	13102	0	4	4	1.4%
<i>Curvularia trifolii</i>	<u>HG779023</u>	13091	0	2	2	0.7%

Name of fungal species	GenBank#	PPRI#	Dry	Flr	Tot	RA
<i>Fusarium brachygibbosum</i>	<u>GQ505450</u>	15927	1	0	1	0.3%
<i>Fusarium chlamyosporum</i>	<u>GQ505439</u>	13098	0	1	1	0.3%
<i>Fusarium equiseti</i>	<u>NR121457</u>	17677	0	1	1	0.3%
<i>Fusarium neocosmosporiellum</i>	<u>KM231803</u>	15913	2	0	2	0.7%
<i>Fusarium oxysporum</i>	<u>U34566</u>	17645	15	44	59	19.9%
<i>Fusarium solani</i>	<u>AF178409</u>	17658	2	14	16	5.4%
<i>Massarina igniaria</i>	<u>JN198485</u>	17626	0	1	1	0.3%
<i>Mortierella alpina</i>	<u>KU729083</u>	15916	3	0	3	1.0%
<i>Myrothecium atroviride</i>	<u>AF455507</u>	17766	0	1	1	0.3%
<i>Myrothecium verrucaria</i>	<u>GQ131886</u>	17775	0	1	1	0.3%
<i>Paecilomyces victoriae</i>	<u>JN899393</u>	17711	0	3	3	1.0%
<i>Penicillium chrysogenum</i>	<u>AF033465</u>	13087	0	10	10	3.4%
<i>Penicillium corylophilum</i>	<u>AF033450</u>	15997	3	0	3	1.0%
<i>Penicillium javanicum</i>	<u>NR111511</u>	17648	0	1	1	0.3%
<i>Penicillium restrictum</i>	<u>NR121239</u>	17767	0	1	1	0.3%
<i>Penicillium reticulisporum</i>	<u>AF033437</u>	17740	0	1	1	0.3%
<i>Penicillium rubefaciens</i>	<u>KC411677</u>	15986	6	0	6	2.0%
<i>Penicillium sclerotiorum</i>	<u>NR077157</u>	15912	1	0	1	0.3%
<i>Penicillium simplicissimum</i>	<u>NR138290</u>	15914	10	0	10	3.4%
<i>Penicillium solitum</i>	<u>NR119494</u>	15925	1	0	1	0.3%
<i>Penicillium vanluykii</i>	<u>JX997007</u>	13099	0	2	2	0.7%
<i>Periconia macrospinoso</i>	<u>KP183999</u>	17627	0	1	1	0.3%
<i>Phoma dimorpha</i>	<u>NR135991</u>	13095	0	2	2	0.7%
<i>Preussia terricola</i>	<u>GQ203765</u>	17662	0	2	2	0.7%
<i>Purpureocillium lilacinum</i>	<u>NR111432</u>	13104	0	3	3	1.0%
<i>Rhizopus arrhizus</i>	<u>NR103595</u>	13092	0	1	1	0.3%
<i>Schizothecium curvisporum</i>	<u>AY999119</u>	17628	0	1	1	0.3%

Name of fungal species	GenBank#	PPRI#	Dry	Flr	Tot	RA
<i>Schizothecium vesticola</i>	<u>AY515365</u>	17679	0	1	1	0.3%
<i>Talaromyces amestolkiae</i>	<u>JX315678</u>	16043	1	0	1	0.3%
<i>Talaromyces cellulolyticus</i>	<u>AB474749</u>	17681	0	1	1	0.3%
<i>Talaromyces pinophilus</i>	<u>JN899382</u>	17634	2	8	10	3.4%
<i>Trichoderma ghanese</i>	<u>Z31015</u>	13101	0	1	1	0.3%
<i>Trichoderma koningiopsis</i>	<u>NR131281</u>	15920	9	9	18	6.1%
<i>Trichoderma longipile</i>	<u>NR134354</u>	17653	0	2	2	0.7%
<i>Trichoderma spirale</i>	<u>NR077177</u>	17680	0	4	4	1.4%
<i>Trichoderma virens</i>	<u>NR138428</u>	17690	0	2	2	0.7%
Total			116	181	297	100%

* Abbreviations: *GenBank#* Closest match to GenBank accession; *PPRI#* Accession number in the South African National Collection of Fungi; *Dry* Fungal species isolated during the dry season; *Flr* Fungal species isolated during the flowering season; *Tot* Fungal species combined from both dry and flowering season samples; *RA* = Relative Abundance given as a percentage of the total population cultured during this study.

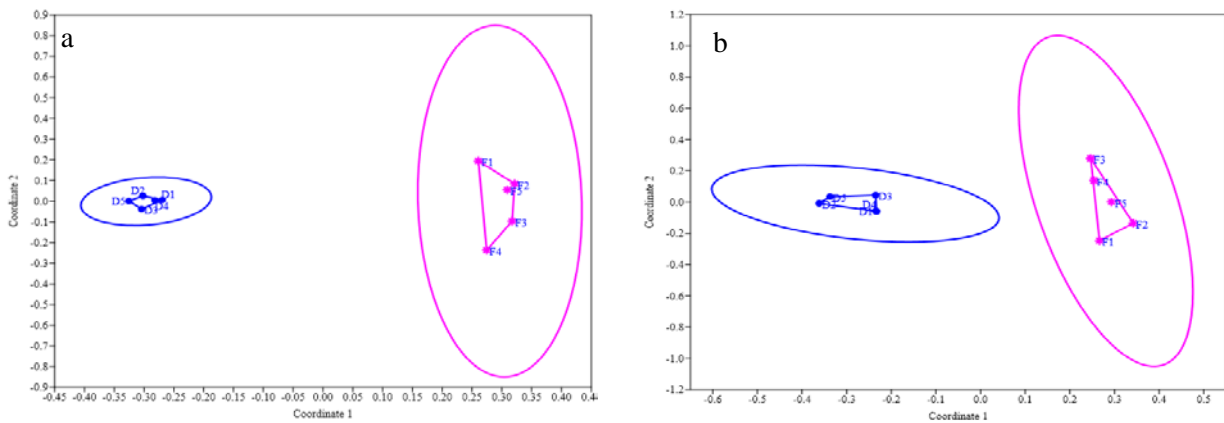


Fig. S1. Non-metric multidimensional scaling (NMDS) plots showing relationships between the fungal communities cultured from soil sampled during the different sampling seasons (D = Dry season; F= Flowering season) from the Namaqua National Park, South Africa using a) relative abundance (employing the Bray-Curtis dissimilarity index) and b) presence / absence (employing the Jaccard dissimilarity index) as indicators. Convex hulls and 95% confidence ellipses are shown. (Stress = 0.091 and 0.1358, respectively).

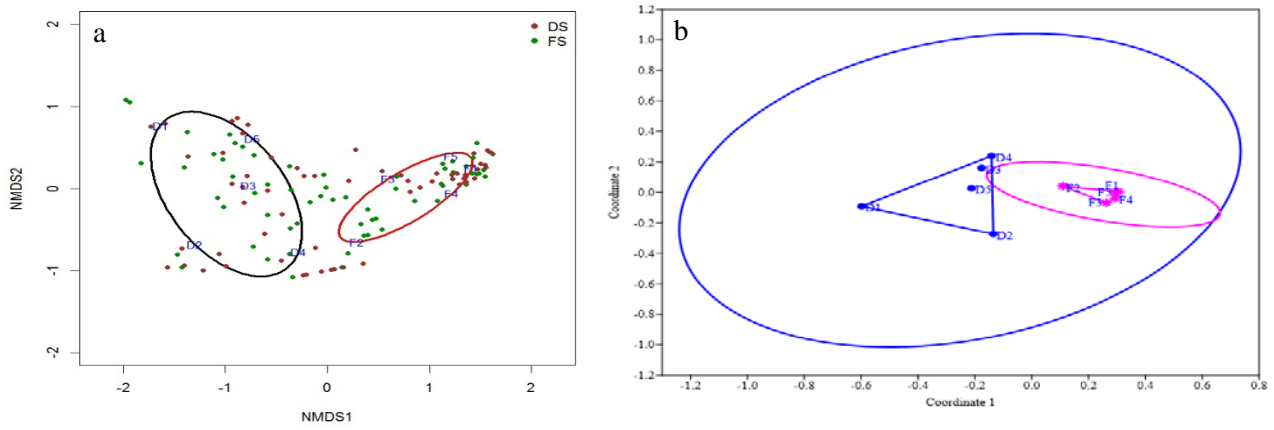


Fig. S2. Non-metric multidimensional scaling (NMDS) plot showing relationships between the fungal communities from rhizosphere soil from different sampling seasons (DS = Dry season; FS= Flowering season) from the Namaqua National Park, South Africa, as determined by culture-independent methods cultured using a) relative abundance and b) presence / absence as indicators the Bray-Curtis and Jaccard dissimilarity indices, respectively. Convex hulls and 95% confidence ellipses are shown. (Stress = 0.127 and 0.168, respectively).