

Supplementary Table S3. Homology sequence analysis of sequences obtained from soil, roots and *Russula* basidiocarp

Sequence	Blas hit sequence	Identity	E-value	Acc.Number	Localitions
Font Roja (FRS/FRR)	Uncultured <i>Russula</i> clone HL27.2	100%	1e ⁻⁸¹	FJ688107	Italy
	Uncultured Russulaceae isolate IT4	100%	1e ⁻⁸¹	DQ061908	Italy: Grosseto
	Uncultured Russulaceae isolate IT4	100%	1e ⁻⁸¹	DQ061907	Italy: Grosseto
	Uncultured <i>Lactarius</i>	99%	2e ⁻⁷⁸	FR852037	Iran
	Uncultured Russulaceae isolate IT8A-3	98%	1e ⁻⁷⁶	DQ061890	Italy: Salerno
	Uncultured Russulaceae isolate IT2B	98%	1e ⁻⁷⁴	DQ061904	Italy: Cagliari
	<i>Russula delica</i>	98%	4e ⁻⁷⁵	AF096987	Spain:Valencia
	<i>Russula</i> cf. <i>brevipes</i> RK15	92%	4e ⁻⁶³	KF007189	Canada
	Uncultured <i>Russula</i>	92%	4e ⁻⁶³	HE601890	Italy:Sardegna
	Uncultured <i>Russula</i> Ir8	92%	2e ⁻⁶¹	FR852101	Iran
<i>Russula</i> basidiocarp	Uncultured fungus clone I_A8_B	94%	5e ⁻⁶¹	KC818319	Switzerland
	Uncultured fungus clone I_E9_B	94%	6e ⁻⁶⁰	KC818338	Switzerland
	<i>Russula sanguinea</i> voucher DG05-118	94%	6e ⁻⁶⁰	JQ888200	Scotland, Culbin forest
	<i>Russula sanguinaria</i> isolate RSK-IX-09	94%	6e ⁻⁶⁰	JQ685712	Montenegro: Zijevo Massif
	<i>Russula sanguinea</i> voucher 982	94%	6e ⁻⁶⁰	JF908649	Italy
	<i>Russula sanguinea</i> isolate UP529	94%	6e ⁻⁶⁰	DQ658889	Uppsala, Sweden
	Uncultured <i>Russula</i> clone UP4_3220B20	92%	3e ⁻⁵⁷	EU057100	USA: Alaska