

Supplemental Table S4: Genomic annotations related to BGCs

Strain	Region	Type	From	To	Most similar known cluster	Product	Similarity
<i>Pasadenomyces melaninifex</i>	Region 3.1	NRPS-like	349990	393358	--	--	--
<i>Pasadenomyces melaninifex</i>	Region 11.1	NRPS,T1PKS	125481	177247	pyranonigrin E	Polyketide	100.00%
<i>Pasadenomyces melaninifex</i>	Region 17.1	T1PKS	89094	135684	melanin	Polyketide	100.00%
<i>Pasadenomyces melaninifex</i>	Region 18.1	NRPS	197626	240901	--	--	--
<i>Pasadenomyces melaninifex</i>	Region 31.1	NRPS-like	135644	179477	--	--	--
<i>Pasadenomyces melaninifex</i>	Region 53.1	T1PKS	1	39566	--	--	--
<i>Pasadenomyces melaninifex</i>	Region 57.1	NRPS	3352	49900	--	--	--
<i>Pasadenomyces melaninifex</i>	Region 58.1	T1PKS	24716	89331	monascorubrin	Polyketide	100.00%
<i>Pasadenomyces melaninifex</i>	Region 87.1	terpene	32507	53565	squalestatin S1	Terpene	40.00%
<i>Pasadenomyces melaninifex</i>	Region 97.1	terpene	1386	25685	--	--	--
<i>Pasadenomyces melaninifex</i>	Region 196.1	NRPS	1	26175	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 1.1	NRPS-like	1725559	1770580	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 2.1	NRPS	680924	724851	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 2.2	T1PKS	973844	1020487	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 4.1	T1PKS	615603	663168	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 4.2	terpene	1104935	1126541	squalestatin S1	Terpene	40.00%
<i>Aaosphaeria pasadenensis</i>	Region 5.1	terpene	1	17641	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 5.2	NRPS	70293	134531	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 6.1	NRPS	1250532	1295790	dimethylcoprogen	NRP	100.00%
<i>Aaosphaeria pasadenensis</i>	Region 6.2	terpene	1315017	1337407	clavaric acid	Terpene	100.00%
<i>Aaosphaeria pasadenensis</i>	Region 8.1	terpene	1200299	1221511	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 9.1	indole	1071707	1092388	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 11.1	NRPS	221640	264697	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 13.1	NRPS-like	686312	730178	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 14.1	T1PKS	156012	199095	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 14.2	T1PKS	658101	699665	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 14.3	T1PKS	749235	797425	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 15.1	T1PKS	3476	38300	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 15.2	T1PKS,indole	588536	639094	secalonic acids	Polyketide	37.00%
<i>Aaosphaeria pasadenensis</i>	Region 19.1	T1PKS	192751	241418	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 24.1	NRPS	109263	158391	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 27.1	NRPS-like	262686	307100	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 30.1	T1PKS	135821	182426	melanin	Polyketide	100.00%
<i>Aaosphaeria pasadenensis</i>	Region 31.1	NRPS-like	124917	169245	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 33.1	terpene	190431	211347	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 35.1	T1PKS	189828	232853	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 35.2	T1PKS	314011	360756	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 41.1	NRPS-like	77044	123777	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 44.1	NRPS	24513	80040	--	--	--
<i>Aaosphaeria pasadenensis</i>	Region 46.1	T1PKS	129843	194763	chaetoviridin E	Polyketide	16.00%
<i>Aaosphaeria pasadenensis</i>	Region 50.1	indole,NRPS-like	140456	191535	--	--	--
<i>Aaosphaeria arxii</i>	Region 5.1	NRPS	140386	186264	dimethylcoprogen	NRP	100.00%
<i>Aaosphaeria arxii</i>	Region 5.2	terpene	203205	225595	clavaric acid	Terpene	100.00%
<i>Aaosphaeria arxii</i>	Region 8.1	NRPS	52423	95570	--	--	--
<i>Aaosphaeria arxii</i>	Region 26.1	terpene	136652	158621	squalestatin S1	Terpene	40.00%
<i>Aaosphaeria arxii</i>	Region 38.1	T1PKS	1	60011	oviridin E / 11-epichaetomugi	Polyketide	22.00%
<i>Aaosphaeria arxii</i>	Region 40.1	NRPS	38102	88208	vancomycin	NRP	8.00%
<i>Aaosphaeria arxii</i>	Region 45.1	NRPS	291459	354667	--	--	--
<i>Aaosphaeria arxii</i>	Region 50.1	T1PKS	1	24106	--	--	--
<i>Aaosphaeria arxii</i>	Region 53.1	T1PKS,indole	101374	151980	secalonic acids	Polyketide	37.00%
<i>Aaosphaeria arxii</i>	Region 54.1	NRPS-like	135055	175907	--	--	--
<i>Aaosphaeria arxii</i>	Region 60.1	indole	92569	113420	--	--	--
<i>Aaosphaeria arxii</i>	Region 60.2	T1PKS	1457427	1504026	melanin	Polyketide	100.00%
<i>Aaosphaeria arxii</i>	Region 63.1	NRPS	14427	59881	--	--	--
<i>Aaosphaeria arxii</i>	Region 68.1	NRPS-like	206722	250588	--	--	--
<i>Aaosphaeria arxii</i>	Region 75.1	T1PKS	51593	99056	--	--	--
<i>Aaosphaeria arxii</i>	Region 77.1	T1PKS	397785	439843	--	--	--

<i>Aaosphaeria arxii</i>	Region 77.2	T1PKS	491234	537886	--	--	--
<i>Aaosphaeria arxii</i>	Region 79.1	T1PKS	402924	450562	--	--	--
<i>Aaosphaeria arxii</i>	Region 83.1	T1PKS	322954	370951	--	--	--
<i>Aaosphaeria arxii</i>	Region 87.1	T1PKS	37166	85220	--	--	--
<i>Aaosphaeria arxii</i>	Region 93.1	T1PKS	56062	102432	--	--	--
<i>Aaosphaeria arxii</i>	Region 94.1	NRPS	31365	59040	--	--	--
<i>Aaosphaeria arxii</i>	Region 100.1	T1PKS	1	11992	--	--	--
<i>Aaosphaeria arxii</i>	Region 109.1	NRPS-like	120410	163741	--	--	--
<i>Aaosphaeria arxii</i>	Region 112.1	T1PKS	1	30025	--	--	--
<i>Aaosphaeria arxii</i>	Region 153.1	terpene	117985	138852	--	--	--
<i>Aaosphaeria arxii</i>	Region 153.2	indole,NRPS-like	459684	517023	--	--	--
<i>Aaosphaeria arxii</i>	Region 159.1	NRPS	142490	198017	--	--	--
<i>Floridaphiala radiotolerans</i>	Region 4.1	T1PKS	862238	908800	melanin	Polyketide	100.00%
<i>Floridaphiala radiotolerans</i>	Region 6.1	T1PKS	665318	715085	--	--	--
<i>Floridaphiala radiotolerans</i>	Region 7.1	terpene	325151	346565	--	--	--
<i>Floridaphiala radiotolerans</i>	Region 8.1	terpene	185241	206665	--	--	--
<i>Floridaphiala radiotolerans</i>	Region 13.1	terpene	23781	48452	--	--	--
<i>Floridaphiala radiotolerans</i>	Region 14.1	NRPS	168805	224504	--	--	--
<i>Floridaphiala radiotolerans</i>	Region 15.1	NRPS-like	29789	73426	--	--	--
<i>Floridaphiala radiotolerans</i>	Region 19.1	T1PKS	221337	269747	--	--	--
<i>Floridaphiala radiotolerans</i>	Region 36.1	T1PKS	1	46989	--	--	--
<i>Floridaphiala radiotolerans</i>	Region 36.2	NRPS-like	124957	168130	--	--	--
<i>Floridaphiala radiotolerans</i>	Region 44.1	T1PKS	147713	182118	--	--	--
<i>Floridaphiala radiotolerans</i>	Region 52.1	T1PKS	33605	83421	--	--	--