**Table S1.** Homologous proteins (with JGI ID) involved in DHN melanin synthesis identified in the genomes of *Leptodontium* sp. PMI\_412 and *Cadophora* sp. DSE1049 using proteins of *Aspergillus fumigatus* Af293 identified by blastp of the proteins presented by Tsai et al. (1999).

DHN-melanin pathway	Aspergillus fumigatus			
	Tsai et al. (1999) ID	Af293 jgi   ID	Leptodontium sp. PMI_412	Cadophora sp. DSE1049
Ayg1	AAF03354.1	Aspfu1 3227	Leptod1 423695	Cadsp1 497711
Alb1	AAC39471.1	Aspfu1 3230	Leptod1 526612	Cadsp1 606172
Arp1	AAC49843.1	Aspfu1 3229	Leptod1 516759	Cadsp1 648036
Arp2	AAF03314.1	Aspfu1 3228	Leptod1 350316	Cadsp1 445556
Abr1	AAF03353.1	Aspfu1 3226	Leptod1 528691	Cadsp1 413886
Abr2	AAF03349.1	Aspfu1 3225	Leptod1 346792	Cadsp1 643922
				:identified by reciprocal best hit
				:Blastp hit, but not best reciprocal bes

**Table S2.** Homologous proteins (with JGI ID) involved in melanin synthesis pathways identified in the genomes of *Leptodontium* sp. PMI\_412 and *Cadophora* sp. DSE1049 using proteins of *Exophiala dermatitidis* UT8656 following Li et al. (2016).

	Exophiala dermatitidis			
DHN-melanin pathway	as in Li et al. (2016)	jgi ID	Leptodontium sp. PMI_412	Cadophora sp. DSE1049
Polyketide synthase (Pks1)	HMPREF1120-03173	Exode1 3244	Leptod1 526612	Cadsp1 606172
Abhydrolase (Ayg1)	HMPREF1120-00377	Exode1 388	Leptod1 423695	Cadsp1 497711
	HMPREF1120-02312	Exode1 2366	Leptod1 423695	Cadsp1 497711
1,3,6,8-Tetrahydroxynaphthalene reductase (Arp2)	HMPREF1120-05939	Exode1 6147	Leptod1 350316	Cadsp1 445556
cytalone dehydratase (Arp1)	HMPREF1120-07724	Exode1 7970	Leptod1 380224	Cadsp1 557078
ungal pigment MCO (Abr2)	HMPREF1120-02828	Exode1 2890	Leptod1 346792	Cadsp1 643922
	HMPREF1120-05645	Exode1 5845	Leptod1 346792	Cadsp1 637625
ungal ferroxidase (Abr1)	HMPREF1120-04510	Exode1 4657	Leptod1 107642	Cadsp1 413886
	HMPREF1120-00173	Exode1 177	Leptod1 107642	Cadsp1 413886
	HMPREF1120-01590	Exode1 1625	Leptod1 107642	Cadsp1 413886
	HMPREF1120-03706	Exode1 3803	Leptod1 425821	Cadsp1 570919
	HMPREF1120-04536	Exode1 4683	Leptod1 425821	Cadsp1 570919
DOPA-melanin pathway				
Tyrosinase (melC2)	HMPREF1120-05316	Exode1 5501	Leptod1 527785	Cadsp1 514369
	HMPREF1120-03345	Exode1 3425	Leptod1 376758	Cadsp1 638399
	HMPREF1120-04514	Exode1 4661	Leptod1 376758	Cadsp1 638399
accase (Lac)	HMPREF1120-05865	Exode1 6070	Leptod1 525353	Cadsp1 572856
	HMPREF1120-00199	Exode1 203	Leptod1 465495	Cadsp1 18911
	HMPREF1120-08116	Exode1 8373	Leptod1 465495	Cadsp1 572856
	HMPREF1120-08564	Exode1 8840	Leptod1 525179	Cadsp1 658257
	HMPREF1120-04578	Exode1 4726	Leptod1 526126	Cadsp1 658257
	HMPREF1120-02754	Exode1 2815	Leptod1 525179	Cadsp1 658257
L-tyrosine degradation pathway				
Tyrosine aminotransferase (Tat)	HMPREF1120-02164	Exode1 2216	Leptod1 525973	Cadsp1 477092
1-Hydroxyphenylpyruvate dioxygenase (hppD)	HMPREF1120-05584	Exode1 5783	Leptod1 348899	Cadsp1 455878
Homogentisate dioxygenase (hmgA)	HMPREF1120-03827	Exode1 3931	Leptod1 379107	Cadsp1 455878
Fumarylacetoacetate hydrolase (fahA)	HMPREF1120-03825	Exode1 3929	Leptod1 518059	Cadsp1 455878
Maleylacetoacetate isomerase (maiA)	HMPREF1120-03438	Exode1 3525	Leptod1 390379	Cadsp1 455878
				:identified by reciprocal best hit
				:Blastp hit, but not best reciprocal

Table S3. Effect of tricyclazole and kojic acid on fungal growth

Strain	Control	Kojic acid	Tricyclazole	Kojic acid + Tricyclazole
Me07	100 ± 3ª	101 ± 6a	$98 \pm 4^{a}$	97 ± 7ª
Pr30	$100 \pm 2^{a}$	$90 \pm 2^{c}$	$103 \pm 2^{a}$	97 ± 1 <sup>b</sup>
Fe06	$100 \pm 2^{c}$	$112 \pm 5^a$	$101 \pm 1^{bc}$	$109 \pm 4$ ab
DSE1049	$100 \pm 12^{b}$	$115 \pm 2^a$	$112 \pm 4^{a}$	$110 \pm 2^a$
Va46	$100 \pm 9^a$	$107 \pm 4^{a}$	$102 \pm 8^a$	$117 \pm 4^{a}$
Pr29	$100 \pm 4^{a}$	96 ± 4ª	95 ± 6 <sup>a</sup>	$97 \pm 4^{a}$

Mycelia were grown for two weeks on Pachlewski medium amended with 50  $\mu$ g/mL kojic acid, 10  $\mu$ g/mL tricyclazole or a combination of both compounds. Values are means  $\pm$  SE (n=9). Significant differences between treatments (P < 0.05, Kruskal-Wallis test) are indicated by different letters.