

Supplementary material

Genomic analysis and assessment of melanin synthesis in *Amorphotheca resinae* KUC3009

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Table S1. Assessment of genome completeness using BUSCO software.

Classification	Number of BUSCO groups
Complete	1300
Complete and single-copy BUSCOs	1294
Complete and duplicated BUSCOs	6
Fragmented BUSCOs	5
Missing BUSCOs	10
Total BUSCOs groups searched	1315

Table S2. Comparisons of genome features between *A. resinae* KUC3009 and the close relatives in the family *Myxotrichaeae*.

Genome features	<i>A. resinae</i> ATCC 22711 (Elena et al, 2017)	<i>O. maius</i> Zn (Kohler et al, 2015)
Number of contigs	309	433
Length of the largest contigs	775,397	1,918,210
Average length of contigs	92,103.7	106,799.1
Total length of contigs	28,460,037	46,243,990
N50	216,801	454,872
Genome coverage	42.9×	28.7×
G+C content (%)	47.6	47.1
Average nucleotide identity (%) with <i>A. resinae</i> KUC3009	98.24	72.83

Table S3. Putative tyrosinase genes found in the *A. resiniae* genome.

Gene name	Contig	Protein ID	Partial or Complete	Predicted signal peptide
Putative tyrosinase gene 1	2	LOCUS_001266-RA	Partial	-
Putative tyrosinase gene 2	3	LOCUS_002768-RA	Complete	None
Putative tyrosinase gene 3	7	LOCUS_006114-RA	Partial	-
Putative tyrosinase gene 4	13	LOCUS_009186-RA	Partial	-

* - indicates no search was conducted due to partial properties of gene.

Table S4. Putative multi-copper oxidase genes found in the *A. resinae* genome.

Gene name	Contig	Protein ID	Partial or Complete	Predicted signal peptide
Putative MCO 1	2	LOCUS_001545-RA	Complete	None
Putative MCO 2	2	LOCUS_001550-RA	Complete	Sec/SPI (<i>p</i> : 0.9514)
Putative MCO 3	2	LOCUS_001570-RA	Partial	-
Putative MCO 4	2	LOCUS_001570-RB	Partial	-
Putative MCO 5	2	LOCUS_001598-RA	Partial	-
Putative MCO 6	2	LOCUS_001762-RA	Partial	-
Putative MCO 7	3	LOCUS_002688-RA	Complete	Sec/SPI (<i>p</i> : 0.9982)
Putative MCO 8	4	LOCUS_003173-RA	Complete	Sec/SPI (<i>p</i> : 0.9818)
Putative MCO 9	4	LOCUS_003552-RA	Complete	Sec/SPI (<i>p</i> : 0.9761)
Putative MCO 10	6	LOCUS_005496-RA	Partial	-
Putative MCO 11	7	LOCUS_005953-RA	Partial	-
Putative MCO 12	7	LOCUS_006220-RA	Partial	-
Putative MCO 13	7	LOCUS_006246-RA	Partial	-
Putative MCO 14	8	LOCUS_006345-RA	Complete	None
Putative MCO 15	8	LOCUS_006346-RA	Partial	-
Putative MCO 16	12	LOCUS_008739-RA	Complete	None

* - indicates no search was conducted due to partial properties of gene.