

Supplementary Materials: Genetic diversity and Ochratoxin A profile of strains of *Aspergillus* section *Nigri* isolated from dried vine fruits

Petra Mikušová, Miroslav Caboň, Andrea Melichárková, Martin Urík, Alberto Ritieni and Marek Slovák

Table S1. List of reference strains and GenBank accession numbers used in the study. An Ex-type strain as defined in McNeill et al. ([1], Recommendation 8B).

Species	Ex-type	ITS	CaM	BenA
<i>Aspergillus aculeatinus</i>	CBS 121060	EU159211	EU159241	EU159220
<i>Aspergillus aculeatus</i>	CBS 172.66	EF661221	EF661148	HE577806
<i>Aspergillus brasiliensis</i>	CBS 101740	FJ629321	FN594543	FJ629272
<i>Aspergillus brunneoviolaceus</i>	CBS 621.78	AJ280003	EF661147	EF661105
<i>Aspergillus carbonarius</i>	CBS 111.26	EF661204	EF661167	EF661099
<i>Aspergillus costaricaensis</i>	CBS 115574	DQ900602	FN594545	FJ629277
<i>Aspergillus ellipticus</i>	CBS 482.65	EF661194	EF661170	EF661122
<i>Aspergillus eucalypticola</i>	CBS 122712	EU482439	EU482433	EU482435
<i>Aspergillus floridensis</i>	NRRL62478, ITEM14783	-	HE984429	HE984412
<i>Aspergillus heteromorphus</i>	CBS 117.55	EU821305	EF661169	EF661103
<i>Aspergillus homomorphus</i>	CBS 101889	EF166063	FN594549	AY820015
<i>Aspergillus ibericus</i>	NRLL 35644	EF661200	EF661163	EF661102
<i>Aspergillus indologenus</i>	CBS 114.80	aj280005	AM419750	AY585539
<i>Aspergillus japonicus</i>	CBS 114.51	AJ279985	FN594551	HE577804
<i>Aspergillus labruscus</i>	ITAL 22.223	KU708544	KT986008	KT986014
<i>Aspergillus luchuensis</i>	CBS 205.80	JX500081	JX500071	JX500062
<i>Aspergillus neoniger</i>	CBS 115656	FJ491682	FJ491700	FJ491691
<i>Aspergillus niger</i>	CBS 554.65	EF661186	EF661154	EF661089
<i>Aspergillus piperis</i>	CBS 112811	EU821316	EU163267	FJ629303
<i>Aspergillus saccharolyticus</i>	CBS 127449	HM853552	HM853554	HM853553
<i>Aspergillus sclerotii-carbonarius</i>	CBS 121057	EU159216	EU159235	EU159235
<i>Aspergillus sclerotioniger</i>	CBS 115572	DQ900606	FN594557	FJ629304
<i>Aspergillus trinidadensis</i>	NRRL 62479	-	HE984434	HE984420
<i>Aspergillus tubingensis</i>	NRRL 4875	EF661193	EF661151	EF661086
<i>Aspergillus uvarum</i>	CBS 121591	AM745757	AM745755	AM745751
<i>Aspergillus vadensis</i>	CBS 113365	AY585549	FN594560	AY585531
<i>Aspergillus welwitschiae</i>	CBS 139.54	FJ629340	KC480196	FJ629291

Table S2: Genotype assignments of isolated strains. GenBank accession numbers are indicated in the brackets.

Species	ITS Ribotype	CaM Haplotype	benA Haplotype	Concatenated ITS/CaM/benA Genotype	Isolated Strains
<i>A. carbonarius</i>	ITS_IV (MK046883)	CaM_IX (MK046876)	benA_I (MT166308)	Concat_I	G_187
			benA_II (MT166309)	Concat_II	G_191

<i>A. luchuensis</i>		CaM_VII (MK046871)	benA_III (MT166310)	Concat_III	G_062	
			benA_IV (MT166311)	Concat_IV	G_198	
		CaM_VI (MK046872)	benA_V (MT166312)	Concat_V	G_201 G_204	
			benA_VI (MT166313)	Concat_VI	G_202	
		CaM_VIII (MK046879)	benA_VII (MT166314)	Concat_VII	G_199	
		CaM_III (MK046873)	benA_VIII (MT166315)	Concat_VIII	G_132	
			benA_IX (MT166316)	Concat_IX	G_172	
			benA_X (MT166317)	Concat_X	G_184	
			benA_XI (MT166318)	Concat_XI	G_183	
		ITS_I (MK046882)	benA_XII (MT166319)	Concat_XII	G_168	
<i>A. tuingensis</i>		CaM_I (MK046874)	benA_XIII (MT166320)	Concat_XIII	G_178 G_188 G_211	
			benA_XIV (MT166321)	Concat_XIV	G_176	
			benA_XV (MT166322)	Concat_XV	G_182	
			benA_XVI* (MT166323)	Concat_XVI	G_190	
			benA_XVII (MT166324)	Concat_XVII	G_174 G_180	
		CaM_II (MK046870)	benA_XVI* (MT166323)	Concat_XVIII	G_045 G_160	
		CaM_IV (MK046875)	benA_XVIII (MT166325)	Concat_XX	G_171	
		CaM_V (MK046877)	benA_XIX (MT166326)	Concat_XXI	G_192	
	<i>A. aff. welwitschiae</i>	ITS_III (MK046881)	CaM_XI (MK046869)	benA_XX (MT166327)	Concat_XXII	G_036
				benA_XXI (MT166328)	Concat_XXIII	G_166
<i>A. welwitschiae</i>	ITS_II (MK046880)	CaM_XII (MK046878)	benA_XXII (MT166329)	Concat_XXIV	G_196	

A.	A. <i>niger</i>	CaM_X (MK046868)	benA_XXIII (MT166330)	Concat_XXV	G_033
			benA_XXIV (MT166331)		Concat_XXVI

* Strains G_061 and G_190 represent identical genotype benA_XVI. Strains G_085, G_131, G_189, G_212, G_203 were not assigned to genotypes due to missing data and their position is resolved in maximum likelihood analysis.

Table S3. The list of strains selected for individual analyses for toxigenic ability using HPLC, Abbreviations: b.d.l. = below detection limit, FB2 = fumonisin B2, FB1 = fumonisin B1.

Aspergillus sect. Nigri	Strain Code	Level of FB1	Level of FB2	Level of OTA
		(µg/kg)	(µg/kg)	(µg/kg)
A. carbonarius	G_187	b.d.l.	b.d.l.	4381,911873
A. carbonarius	G_191	b.d.l.	b.d.l.	2477,256
A. luchuensis	G_199	b.d.l.	b.d.l.	b.d.l.
A. luchuensis	G_202	b.d.l.	b.d.l.	b.d.l.
A. luchuensis	G_204	b.d.l.	b.d.l.	b.d.l.
A. luchuensis	G_201	b.d.l.	b.d.l.	b.d.l.
A. luchuensis	G_198	b.d.l.	b.d.l.	b.d.l.
A. luchuensis	G_062	b.d.l.	b.d.l.	b.d.l.
A. niger	G_033	1213,375	11118,651	b.d.l.
A. niger	G_209	510,889	5509,260	b.d.l.
A. niger	G_210	535,653	5568,915	b.d.l.
A. niger	G_050	611,370	7413,953	b.d.l.
A. welwitschiae	G_036	b.d.l.	b.d.l.	b.d.l.
A. welwitschiae	G_166	b.d.l.	b.d.l.	b.d.l.
A. welwitschiae	G_196	b.d.l.	b.d.l.	b.d.l.
A. tubingensis	G_178	b.d.l.	b.d.l.	b.d.l.
A. tubingensis	G_180	b.d.l.	b.d.l.	b.d.l.
A. tubingensis	G_132	b.d.l.	b.d.l.	b.d.l.
A. tubingensis	G_160	b.d.l.	b.d.l.	b.d.l.
A. tubingensis	G_171	b.d.l.	b.d.l.	b.d.l.

