

Supplementary

Toxicity of the Diatom Genus *Pseudo-nitzschia* (Bacillariophyceae): Insights from Toxicity Tests and Genetic Screening in the Northern Adriatic Sea

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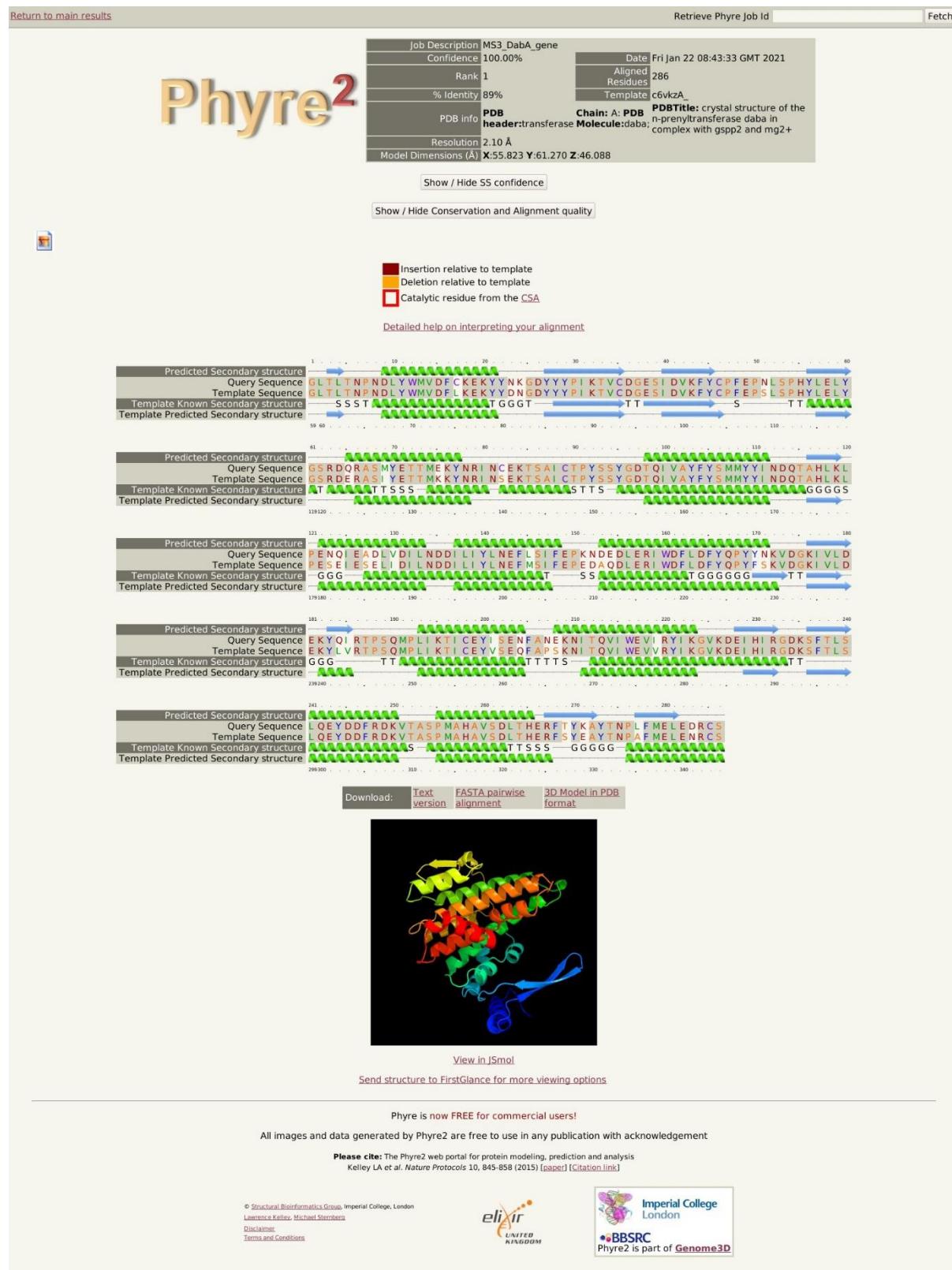


Figure S1. Homology modelling of the translated sequence of the *dabA* gene from *Pseudo-nitzschia multiseries*, strain MS3. Most of the secondary structures are recovered and the protein resembles the published crystalline structure.

Table S1. ITS accession numbers of strains used in the phylogeny reconstruction.

Species	Strain	Geographical Area	Genbank ITS Accession	GenBank dabA Accession	Reference for Toxicity
<i>P. abreensis</i>	PnMi81	Malaysia (Borneo)	KX572953		[1]
<i>P. americana</i>	PH25	E Australia (NSW)	KC017472		[2]
<i>P. arctica</i>	P2F2	Greenland	KT589421		[3]
<i>P. arenysensis</i>	CHB	E Australia (NSW)	KC017466		[4]
<i>P. australis</i>	Delta 2	Portugal (Aveiro)	EU684233		[5]
	L3.16	Namibia	MH376354		[6]
<i>P. batesiana</i>	PnMi32	Malaysia (Borneo)	KX572953		[1]
<i>P. bipertita</i>	MC4571	Malaysia (Borneo)	MT023649		[1]
<i>P. bucculenta</i>	L1.3	Namibia	MH376341		[6]
<i>P. caciantha</i>	PnSL05	E Australia (NSW)	KF482056.1		[7]
	COOG100215-1	E Australia (NSW)	LC154962		[7]
<i>P. calliantha</i>	(09)2A12	Greece (Aegean)	JF714901		[8]
	ICMB-158	Spain (Catalonia)	EU327378		[9]
	WAG	E Australia (NSW)	KC017463		[4]
	PNF 1020 2	NE Adriatic			This study
	PNF 1020 5	NE Adriatic			This study
	PNF 1020 3	NE Adriatic			This study
	BF-818-B2	NE Adriatic			This study
<i>P. circumpora</i>	PnSb58	Malaysia (Borneo)	JN252430		[10]
<i>P. chiniana</i>	MC3012	Taiwan Strait	MK411964		[11]
<i>P. cuspidiata</i>	MER	E Australia (NSW)	KC017465		[4]
<i>P. cuspidiata</i> var. <i>manzanillensis</i>	SQS-2017a	Mexico (Pacific)	KU527659		[12]
<i>P. decipiens</i>	S1.6	Namibia	MH376345		[6]
<i>P. delicatissima</i>	219 A1	NE Adriatic	MN634971.1		This study
	219 A2	NE Adriatic	MN634973.1		This study
	219 A3	NE Adriatic	MN634969.1		This study
	219 B1	NE Adriatic	MN634972.1		This study
	219 B2	NE Adriatic	MN634970.1		This study
	219 B3	NE Adriatic	MN634967.1		This study
	119 A2	NE Adriatic	MN634965.1		This study
	119 B3	NE Adriatic	MN634964.1		This study
	119 C1	NE Adriatic	MN634966.1		This study
	119 C4	NE Adriatic	MN634968.1		This study
	ICMB-102	Spain (Catalonia)	EU478793		[9]
		Greece (Aegean)	JF714910.		[8]
	Pn100-07A2	Northwestern Atlantic Ocean (Gulf of Maine)	KF006826		[13]
<i>P. dolorosa</i>	S3.2	Namibia	MH376344		[6]
<i>P. fraudulentta</i>	S2.1	Namibia	MH376349		[6]
<i>P. fryxelliana</i>	NWFSC 241	E Pacific (Washington, USA)	JN050288		[14]
<i>P. fukuyoi</i>	PnLk02	Malaysia (Borneo)	JN252420		[15]

<i>P. galaxiae</i>	00MA090919-C1	NE Adriatic	MW527383	This study
	00MA090919-A2	NE Adriatic	MW527387	This study
	BAT2	NE Adriatic	MW527386	This study
	B1M	NE Adriatic	MW527388	This study
	B2S	NE Adriatic	MW527390	This study
	B3S	NE Adriatic	MW527391	This study
	C2L	NE Adriatic	MW527384	This study
	MC994	Taiwan Strait	MK411977	[11]
	(10)4A3	Greece (Aegean)	JF714915	[8]
<i>P. hallegraefii</i>	CTD44 2	E Australia (NSW)	MF044023	[16]
<i>P. hasleana</i>	NWFSC 186	E Pacific (Washington, USA)	N050282	[14]
<i>P. kodamae</i>	Pnmi92	Malaysia (Borneo)	KR021310	[1]
	PnPd31	Malaysia (Malacca)	KF482051	[15]
<i>P. limii</i>	Pnmi16	Malaysia (Borneo)	KR021311	[1]
<i>P. linea</i>	ICMB-156	Spain (Catalonia)	FJ489632	[9]
<i>P. lineola</i>	NWFSC 188	Malaysia (Malacca)	MT040024	[15]
<i>P. lundholmiae</i>	Pnmi01	Malaysia (Borneo)	KR021315	[1]
<i>P. manni</i>	(08)10A2	Greece (Aegean)	JF714905	[8]
<i>P. micropora</i>	PS90/1	E Australia (NSW)	KC017448	[2]
<i>P. multiseries</i>	COOG	E Australia (NSW)	KC017469	[4]
		Northwestern Atlantic		[17]
	Pn-1	Ocean (Chesapeake Bay))	DQ445651	
<i>P. multistriata</i>	MS2	NE Adriatic	MW527382	MZ486437
	MS3	NE Adriatic	MW527381	MZ486439
	119 A3	NE Adriatic	MN634976.1	This study
	119 A4	NE Adriatic	MN634975.1	MZ486438
	119 C4	NE Adriatic	MN634974.1	MZ486440
	PH25C	E Australia (NSW)	KC017470	[4]
	MC4171	Taiwan Strait	MK411975	[2]
	Pnmi07	Malaysia (Borneo)	KR021314	[1]
<i>P. nanaoensis</i>	MC4213	South China Sea (Guangdong coast)	MG787882	[18]
<i>P. plurisecta</i>	L3.9	Namibia	MH376350	[6]
<i>P. pseudodelicatis-sima</i>	P-11	Portugal	AY257854.	[19]
	(09)10A4	Greece (Aegean)	JF714921	[8]
<i>P. pungens</i>	ICMB-143	Spain (Catalonia)	EU327366	[9]
	(10)4A2	Greece (Aegean)	JF714922	[8]
<i>P. pungens</i> var. <i>cingulata</i>	L3.13	Namibia	MH376355	[6]
<i>P. pungens</i> var. <i>aveirensis</i>	Alfa 1	Portugal (Aveiro)	EU684234	[5]
<i>P. qiana</i>	MC3033	Taiwan Strait	MK412849	[2]
<i>P. sabit</i>	MC4399	South China Sea (Guangdong coast)	MT040005	[20]

<i>P. seriata</i>	Pn114–08C2	Northwestern Atlantic Ocean (Gulf of Maine)	KF006824	[13]
<i>P. simulans</i>	MC940	South China Sea (Guangdong coast)	MF374771	[21]
	MC984	South China Sea (Guangdong coast)	MF374772	[21]
<i>P. subcurvata</i>	M11-04	Antarctica (Queen Maud Land)	MT420907	[22]
	M5-3	Antarctica (Queen Maud Land)	MT420903	[22]
<i>P. subraudulenta</i>	PnMi155 (08)8A3	Malaysia (Borneo) Greece (Aegean)	KR021296. JF714929	[1] [8]
<i>P. subpacifica</i>	MC4435	South China Sea (Guangdong coast)	MT040017	[20]
<i>P. uniseriata</i>	MC4196	South China Sea (Guangdong coast)	MT040024	[20]
<i>P. yuensis</i>	MC3209	South China Sea (Guangdong coast)	MT040025	[20]

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