Supplementary table. List of diatom taxa identified in all springs studied.

	Majorca			Sardinia								Veneto						Friuli					
Taxa	**FP**	**FL**	**SV**	**FO**	**PB**	**DN**	**DR**	**VA**	**MS**	**SG**	**UL**	**BR**	**BA**	**FC**	**LF**	**PR**	**TO**	**TR**	**UC**	**BM**	**RR**	**GD**	**AL**
Achnanthes coarctata (Brébisson ex W. Smith) Grunow									0.2														
Achnanthes inflata (Kützing) Grunow							0.5																
Achnanthidium aff. *subhudsonis* (Hustedt) H. Kobayasi					2.7																		
Achnanthidium atomoides Monnier, Lange-Bertalot & Ector																		1.0					3.5
Achnanthidium straubianum (Lange-Bertalot) Lange-Bertalot	0.7	0.4		2.1																			
Achnanthidium exile (Kützing) Heiberg	9.2																						
Achnanthidium lineare W. Smith				1.7			0.9			0.6					0.8			7.7	2.4	0.5	0.5	5.4	7.0
Achnanthidium minutissimum (Kützing) Czarnecki	76.6	7.9	64.6	16.4	35.1	31.2	5.3	4.3	0.9	3.6	1.0	43.3	9.8	31.4	69.2	15.7					4.4		
Achnanthidium pseudolineare Van de Vijver, Novais & Ector																							4.5
Achnanthidium pyrenaicum (Hustedt) Kobayasi	6.1											2.5			7.2			52.6	74.9	30.0	6.3	63.4	22.9
Achnanthidium sp.																						0.5	
Achnanthidium subatomus (Hustedt) Lange-Bertalot	0.5					3.2				2.1													
Amphora copulata (Kützing) Schoeman & Archibald									0.2														
Amphora inariensis Krammer										0.6		7.8	12.3	40.2	1.6	1.6							
Amphora indistincta Levkov				1.0		0.5	3.0		0.7	11.1	2.9												
Amphora ovalis (Kützing) Kützing		1.1					0.9		0.5	0.9				0.8									
Amphora pediculus (Kützing) Grunow	2.1	27.0	1.2	6.9		1.5	17.6	0.7	15.3	21.7	17.9	10.7	11.9	7.9	3.9		0.2	1.0	0.5	0.5			
Aulacoseira sp.											0.2												
Caloneis bacillum (Grunow) Cleve		0.9																					
Caloneis fontinalis (Grunow) Cleve-Euler				0.7			0.7		3.9	6.0		5.6			1.0		0.8						
Caloneis lancettula (Schulz) Lange-Bertalot & Witkowski							0.2																
Cocconeis euglypta Ehrenberg	0.9	14.3			7.7	6.1	7.5		12.1	11.1	1.7				0.2								
Cocconeis neothumensis Krammer							0.5			0.4	0.2												
Cocconeis placentula var. *lineata* (Ehrenberg) Van Heurck																				0.5	0.5		
Cocconeis pseudolineata (Geitler) Lange-Bertalot					1.6	46.2			0.5	7.2	0.5	9.4										0.5	1.0
Cosmioneis pusilla (W. Smith) D.G. Mann & Stickle									0.7														
Craticula buderi (Hustedt) Lange-Bertalot								1.4	0.2														
Crenotia thermalis (Rabenhorst) Wojtal					2.3																		

Cyclotella meneghiniana Kützing									0.2											
Cymbella affinis Kützing			1.4															1.5	9.8	
Cymbella cf. *parva* (W. Smith) Kirchner																			2.0	
Cymbella tridentina Lange-Bertalot, M. Cantonati & A. Scalfi																				32.3
Cymbella vulgata Krammer			0.7																	
Denticula subtilis Grunow									0.2						0.4					
Denticula tenuis Kützing	0.2													8.0			0.5	7.0	0.5	2.0	1.5
Diatoma ehrenbergii Kützing																		0.5		
Diploneis cf. *oculata* (Brébisson) Cleve										2.1	0.2									
Diploneis elliptica (Kützing) Cleve		0.7			0.7				0.2	0.2	0.2									
Diploneis krammeri Lange-Bertalot & Reichardt														0.2						
Diploneis oblongella (Nägeli ex Kützing) Cleve-Euler													0.4	0.2	1.4					
Diploneis oculata (Brébisson) Cleve		0.4																		
Diploneis separanda Lange-Bertalot	0.2		6.3						0.5	2.1		0.4								
Diploneis sp.1		0.2																		
Diploneis sp.2							0.5			0.2										
Diploneis sp.3							0.7			1.7										
Ellerbeckia arenaria (Moore ex Ralfs) R.M. Crawford							5.3		0.7	1.5										
Encyonema lange-bertalotii Krammer																			0.5	
Encyonema minutum (Hilse) D.G. Mann												0.3						1.5	1.5	7.3
Encyonema silesiacum (Bleisch) D.G. Mann																0.5	0.5			
Encyonema ventricosum (Agardh) Grunow																0.5	11.1		2.0	4.4
Encyonema vulgare Krammer					1.8															
Encyonopsis falaisensis (Grunow) Krammer														0.2						
Encyonopsis minuta Krammer & E. Reichardt	0.5				2.0															
Encyonopsis subminuta Krammer & Reichardt														1.6						
Encyonopsis sp.		0.2																		
Epithemia sp.	0.5																			
Eucocconeis laevis (Østrup) Lange-Bertalot																			0.5	
Eunotia arcubus Nörpel & Lange-Berlalot			15.3																	
Eunotia glacialis Meister										0.6										
Eunotia minor (Kützing) Grunow						0.5	0.7													
Fallacia insociabilis (Krasske) D.G. Mann									0.2						20.0					

Fallacia muraloides (Hustedt) D.G. Mann											5.7							
Fallacia subhamulata (Grunow) D.G. Mann									0.9		2.5							
Fallacia sublucidula (Hustedt) D.G. Mann								0.2	5.3									
Fragilaria candidagilae Almeida, C. Delgado, Novais & S. Blanco								0.2										
Fragilaria capucina Desmazières	0.7			0.2														
Fragilaria rumpens (Kützing) G.W.F. Carlson					0.2													
Fragilaria vaucheriae (Kützing) J.B. Petersen								0.2							0.5			
Geissleria gereckei Cantonati & Lange-Bertalot									0.6									
Gomphonema aff. *cymbelliclinum* Reichardt & Lange-Bertalot							30.2											
Gomphonema angustum Agardh											0.9							
Gomphonema elegantissimum Reichardt & Lange-Bertalot													26.8	5.8	47.5			3.0
Gomphonema graciledictum Ehrenberg		1.2																
Gomphonema lateripunctatum Reichardt & Lange-Bertalot		1.2																
Gomphonema micropus Kützing		0.5	6.2				1.2			1.5								
Gomphonema minusculum Krasske												0.2				1.5		
Gomphonema minutum (C. Agardh) C. Agardh																3.9		
Gomphonema olivaceum (Hornemann) Brébisson								0.2										
Gomphonema parvulum (Kützing) Kützing										0.2								
Gomphonema pumilum (Grunow) Reichardt & Lange-Bertalot												1.6						
Gomphonema rosenstockianum Lange-Bertalot & Reichardt		0.9			3.7					18.6								
Gomphonema sp.1	1.4																	
Gomphonema sp.2															12.0			
Gomphonema sp.3																		3.5
Gomphonema sp.4			0.2	1.4														
*Gomphonema subclavatu*m Grunow						0.5						0.2					1.5	17.4
Gomphonema tergestinum (Grunow) Fricke													7.2	1.9		6.3		
Gomphonema truncatum Ehrenberg		0.5																
Gomphonema utae Lange-Bertalot & Reichardt											0.3							

Supplementary table. Continued

	Majorca			Sardinia								Veneto						Friuli					
Taxa	**FP**	**FL**	**SV**	**FO**	**PB**	**DN**	**DR**	**VA**	**MS**	**SG**	**UL**	**BR**	**BA**	**FC**	**LF**	**PR**	**TO**	**TR**	**UC**	**BM**	**RR**	**GD**	**AL**
Gomphosphenia sp.										0.2													
Gomphosphenia lingulatiformis (Lange-Bertalot & Reichardt) Lange-Bertalot													32.7	0.6									
Gyrosigma acuminatum (Kützing) Rabenhorst									0.5														
Halamphora montana (Krasske) Levkov				0.5																			
Halamphora sp.1								0.7															
Halamphora sp.2					1.6																		
Halamphora veneta (Kützing) Levkov					0.2		0.5		0.7														
Halaphora normanii (Rabenhorst) Levkov				0.2			1.1		0.2	0.2	0.5	0.3			0.4		1.9						
Hannaea arcus (Ehrenberg) R.M. Patrick																					10.2		
Hantzschia abundans Lange-Bertalot								0.2	0.7														
Hantzschia amphyoxis (Ehrenberg) Grunow									0.5														
Humidophila contenta (Grunow) Lowe, Kociolek et al.		3.7			0.2		0.2		5.9		3.6		2.0			1.6	57.3						
Humidophila gallica (W. Smith), Lowe, Kociolek et al.																	2.1						
Humidophila perpusilla (Grunow) Lowe, Kociolek et al.											2.2	0.6											
Karayevia clevei (Grunow) Round & Bukhtiyarova											0.2												
Karayevia kolbei (Hustedt) Bukhtiyarova		4.4																					
Kolbesia gessneri (Hustedt) Aboal							9.6		12.3	1.9													
Lemnicola hungarica (Grunow) Round & Basson							1.4																
Luticola acidoclinata Lange-Bertalot					0.2																		
Luticola mutica (Kützing) D.G. Mann									0.7														
Luticola sp.										0.2													
Mayamaea muraliformis (Hustedt) Lange-Bertalot		0.2																					
Melosira varians Agardh							0.5		1.6	0.2													
Meridion circulare (Greville) C. Agardh			0.2	5.7		1.7	0.2	61.2			16.2					0.6					41.5		3.0
Navicula antonii Lange-Bertalot				1.4					0.2				0.2										
Navicula crytocephala Kützing			1.6	1.0																			
Navicula cryptotenella Lange-Bertalot		0.4		0.2						3.2			2.1		0.2								
Navicula cincta (Ehrenberg) Ralfs					3.8				0.7		0.2												

Navicula sp.1											0.5									
Navicula sp.2				3.2																
Navicula sp.3																			0.5	
Navicula splendicula Van Landingham																	0.5			
Navicula striolata (Grunow) Lange-Bertalot						0.5														
Navicula tripunctata (O.F. Müller) Bory						0.2		2.5	3.8			0.9								
Navicula upsaliens (Grunow) Peragallo												0.4								
Navicula veneta Kützing			0.7	1.1	0.2	1.4		2.3		0.2						0.2				
Navicula veronensis Lange-Bertalot & Cantonati																1.2				
Navicula vilaplanii (Lange-Bertalot & Sabater) Lange-Bertalot & Sabater								0.2								4.1				
Nitzschia amphibia Grunow			1.0			1.1		0.9				0.5			0.3					
Nitzschia bryophila Hustedt																0.2				
Nitzschia communis Rabenhorst			1.9																	
Nitzschia dissipata var. media (Hantzsch) Grunow												1.2								
Nitzschia fonticola Grunow						3.4		0.2									0.5	1.0		0.5	
Nitzschia frustulum (Kützing) Grunow																7.4				
Nitzschia inconspicua Grunow	0.7		17.4	0.9	0.2	0.5		2.1												
Nitzschia kuetzingiana Hilse												2.3								
Nitzschia linearis (C. Agardh) W. Smith			1.7		0.2	0.7		2.7		1.0	0.3			0.2						
Nitzschia palea (Kützing) W. Smith			0.2																	
Nitzschia recta Hantzsch ex Rabenhorst						0.2		5.2												
Nitzschia sociabilis Hustedt									0.2											
Nitzschia solgensis Cleve-Euler			2.4			0.7			0.2											
Nitzschia sp.1								0.5												
Nitzschia sp.2											0.3									
Nitzschia umbonata (Ehrenberg) Lange-Bertalot								0.2												
Nitzschia valdestriata Aleem & Hustedt						1.1														
Odontidium mesodon (Ehrenberg) Kützing															0.2		0.5	0.5	18.0	0.5	0.5
Pinnularia sp.						0.2														
Planothidium frequentissimum (Lange-Bertalot) Lange-Bertalot	9.7	3.2	4.5	28.6	1.2	2.5		1.8		16.0	1.3	0.7	1.3	0.6	8.0	2.3				
Planothidium haynaldii (Schaarschmidt) Lange-Bertalot			1.0																	
Planothidium lanceolatum (Brébisson ex Kützing) Lange-Bertalot			12.9			0.7		0.9	6.0	13.6	4.4	0.4			1.5		1.9		0.5	0.5
Planothidium sp.					1.2															

Platessa conspicua (A. Mayer) Lange-Bertalot		11.9																		
Platessa hustedtii (Krasske) Lange-Bertalot									0.9											
Pleurosira laevis (Ehrenberg) Compère							1.1													
Psammothidium curtissimum (J.R. Carter) Aboal														1.6						
Psammothidium grischunum (Wuthrich) Bukhtiyarova & Round													7.7							
Pseudostaurosira alvareziae Cejudo-Figueras, E.A. Morales & Ector							12.3	5.7												
Pseudostaurosira subsalina (Hustedt) E.A. Morales								0.5												
Reimeria sinuata (Gregory) Kociolek & Stoermer						1.0		0.2	0.2	0.5							0.5		0.5	0.5
Reimeria uniseriata S.E. Sala, J.M. Guerrero & M.E. Ferrario		0.9					0.5		0.2	0.2										
Rhoicosphenia abbreviata (C. Agardh) Lange-Bertalot		1.8			0.2			5.9	0.9											
Rhopalodia gibba (Ehrenberg) O. Müller					3.8															
Sellaphora atomoides (Grunow) C.E. Wetzel & Van de Vijver				1.7										1.4	20.8					
Sellaphora crassulexigua (E. Reichardt) C.E. Wetzel & Ector									0.9											
Sellaphora nigri (De Notaris) C.E.Wetzel & Ector	0.2	13.2		10.2	0.7		5.5				11.6	0.9	9.0		26.3	1.0				
Sellaphora absoluta (Hustedt) C.E. Wetzel, Ector et al.												3.7								
Sellaphora saugerresii (Desmazières) C.E. Wetzel & D.G. Mann						0.5	1.6	1.6		0.2										
Sellaphora seminulum (Grunow) D.G. Mann							2.3				1.3	8.2	0.6		21.7					
Simonsenia delognei (Grunow) Lange-Bertalot									0.2											
Stauroneis separanda Lange-Bertalot & Werum							3.4									0.6				
Stauroneis smithii Grunow			0.2																	
Surirella angusta Kützing								0.2												
Surirella brebissonii var. *brebissonii* Krammer & Lange-Bertalot																0.2				
Tryblionella debilis Arnott ex O'Meara								0.5												
Tryblionella hungarica (Grunow) Frenguelli								0.2												
Ulnaria monodii (Guermeur) Cantonati & Lange-Bertalot			1.2					0.9												
Ulnaria ulna (Nitzsch) Compère				0.2		0.5	2.1	2.7												