

TABLE S3- Cyanobacteria detected on limestone cultural heritage by molecular methods

Name of the Cultural Heritage	Phylum	Class	Order	Family	Genus	Specie	Culture	Molecular biology	Indoors/ Outdoors	Country	Color	Reference
The old cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	unclassified family	Oxyphotobacteria	not identified	none	NGS	Both	Portugal	dark, green	Coelho et al 2021 [57]
The old cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	unknown family	not identified	not identified	none	NGS	Both	Portugal	black, green	Coelho et al 2021 [57]
Batalha Monastery	Cyanobacteria	not identified	not identified	not identified	not identified	not identified	none	NGS	Outdoors	Portugal	/	Ding et al., 2021 [26]
The Klippe statues in Hangzhou	Cyanobacteria	Cyanophyceae	Chroococcidiopsidales	Chroococcidiopsidaceae	Chroococcidiopsis	not identified	none	NGS	Outdoors	China	/	Li et al., 2017 [20]
Qingxing palace and Lingyin and Kaihua temple	Cyanobacteria	Cyanophyceae	Synechococcales	Acaryochloridaceae	Acaryochloris	not identified	none	NGS	Outdoors	China	/	Li et al., 2016 [31]
Qingxing palace and Lingyin and Kaihua temple	Cyanobacteria	Cyanophyceae	Nostocales	Scytonemataceae	Scytonema	not identified	none	NGS	Outdoors	China	/	Li et al., 2016 [31]
Qingxing palace and Lingyin and Kaihua temple	Cyanobacteria	Cyanophyceae	Pseudanabaenales	Leptolyngbyaceae	Leptolyngbya	not identified	none	NGS	Outdoors	China	/	Li et al., 2016 [31]
Qingxing palace and Lingyin and Kaihua temple	Cyanobacteria	Cyanophyceae	Chroococcidiopsidales	Chroococcidiopsidaceae	Chroococcidiopsis	not identified	none	NGS	Outdoors	China	/	Li et al., 2016 [31]
Lingyan Temple	Cyanobacteria	Cyanophyceae	Nostocales	Scytonemataceae	Scytonema	not identified	none	NGS	Outdoors	China	/	Li et al., 2016 [31]
Lingyan Temple	Cyanobacteria	Cyanophyceae	Chroococcidiopsidales	Chroococcidiopsidaceae	Chroococcidiopsis	not identified	none	NGS	Outdoors	China	/	Li et al., 2016 [31]
The Chaalis abbey	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Anabaena	cylindrica	LB agar containing 50 mg/mL ampicillin	CDM (PCR)	Outdoors	France	discolouration	Mihajlovski et al., 2017 [18]
The Chaalis abbey	Cyanobacteria	Cyanophyceae	Nostocales	Symphyonemataceae	Loriellopsis	cavernicola	LB agar containing 50 mg/mL ampicillin	CDM (PCR)	Outdoors	France	discolouration	Mihajlovski et al., 2017 [18]
Qing Dynasty's temporary palace in West Lake Cultural Landscape of Hangzhou	Cyanobacteria	not identified	not identified	not identified	not identified	not identified	none	NGS	Outdoors	China	/	Wu et al., 2021 [16]
Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Chroococcidiopsidales	Chroococcidiopsidaceae	Chroococcidiopsis	thermalis	none	NGS	Indoors	Israel	/	Delegou et. al, 2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Nostocales	Symphyonemataceae	Loriellopsis	cavernicola	none	NGS	Indoors	Israel	/	Delegou et. al, 2022 [38]

Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Chroococciopsidales	Aliterellaceae	Aliterella	antarctica	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Synechococcales	Trichocoleusaceae	Trichocoleus	desertorum	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Oscillatoriophycideae	Oscillatoriales	Potamolinea	caerulea	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Cylindrospermum	stagnale	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Pleurocapsales	Dermocarpellaceae	Stanieria	cyanosphaera	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Synechococcales	Acaryochloridaceae	Acaryochloris	marina	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Anabaena	cylindrica	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Oscillatoriophycideae	Oscillatoriales	Gomontiellaceae	Crinalium	epipsammum	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Oscillatoriophycideae	Oscillatoriales	Coleofasciculaceae	Coleofasciculus	chthonoplastes	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Oscillatoriophycideae	Oscillatoriales	Oscillatoriaceae	Oscillatoria	viridis	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Synechococcales	Synechococcaceae	Synechococcus	elongatus	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Oscillatoriales	Microcoleaceae	Arthrospira	platensis	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Oscillatoriales	Coleofasciculaceae	Kastovskya	adunca	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Oscillatoriales	Oscillatoriaceae	Aerosakkonema	funiforme	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Oscillatoriales	Coleofasciculaceae	Cephalothrix	komarekiana	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Holy Aedicule (Holly rock)	Cyanobacteria	Cyanophyceae	Gloeobacterales	Gloeobacteraceae	Gloeobacter	violaceus	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Petroglyph sites from the Negev Desert	Cyanobacteria	Cyanobacteriota	Pseudanabaenales	Leptolyngbyaceae	Neosynechococcus	sphagnicola	none	NGS	Indoors	Israel	/	Delegou et. al,2022 [38]
Petroglyph sites from the Negev Desert	Cyanobacteria	Cyanophyceae	Oscillatoriales	Microcoleaceae	Symplocastrum	torsivum	none	NGS	Outdoors	Israel	/	Nir et al., 2019 [32]
Petroglyph sites from the Negev Desert	Cyanobacteria	Cyanobacteriota	Cyanophyceae	Pseudanabaenales	Pseudanabaena	cyanobacterium	none	NGS	Outdoors	Israel	/	Nir et al., 2019 [32]
Petroglyph sites from the Negev Desert	Cyanobacteria	Cyanophyceae	Pseudanabaenales	Leptolyngbyaceae	Leptolyngbya	scottii	none	NGS	Outdoors	Israel	/	Nir et al., 2019 [32]

Petroglyph sites from the Negev Desert	Cyanobacteria	Cyanophyceae	Synechococcales	Synechococcaceae	Synechococcus	not identified	none	NGS	Outdoors	Israel	/	Nir et al., 2019 [32]
Orologio Tower (Martano)	Cyanobacteria	Cyanophyceae	Pleurocapsales	Hyellaceae	Pleurocapsa	not identified	BG11 liquid medium	CDM (PCR)	Outdoors	Italy	green	Miller et al., 2009 [64]
Santa Clara-a-Velha Monastery	Cyanobacteria	Cyanophyceae	Pleurocapsales	Hyellaceae	Pleurocapsa	not identified	BG11 liquid medium	CDM (PCR)	Outdoors	Portugal	green	Miller et al., 2009 [64]
Santa Clara-a-Velha Monastery	Cyanobacteria	Cyanophyceae	Pseudanabaenales	Leptolyngbyaceae	Leptolyngbya	not identified	BG11 liquid medium	CDM (PCR)	Outdoors	Portugal	green	Miller et al., 2009 [64]
Ajuda National Palace (Lisbon)	Cyanobacteria	Cyanophyceae	Chroococcidiopsidales	Chroococcidiopsidaceae	Chroococcidiopsis	not identified	BG11 liquid medium	CDM (PCR)	Outdoors	Portugal	green	Miller et al., 2009 [64]
Ajuda National Palace (Lisbon)	Cyanobacteria	Cyanophyceae	Nostocales	Aphanizomenonaceae	Cylindrospermopsis	not identified	BG11 liquid medium	CDM (PCR)	Outdoors	Portugal	green	Miller et al., 2009 [64]
Ajuda National Palace (Lisbon)	Cyanobacteria	Cyanophyceae	Oscillatoriales	Microcoleaceae	Microcoleus	not identified	BG11 liquid medium	CDM (PCR)	Outdoors	Portugal	green	Miller et al., 2009 [64]
Ajuda National Palace (Lisbon)	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Nostoc	not identified	BG11 liquid medium	CDM (PCR)	Outdoors	Portugal	green	Miller et al., 2009 [64]
Ajuda National Palace (Lisbon)	Cyanobacteria	Cyanophyceae	Pleurocapsales	Hyellaceae	Pleurocapsa	not identified	BG11 liquid medium	CDM (PCR)	Outdoors	Portugal	green	Miller et al., 2009 [64]
Cathedral of Seville	Cyanobacteria	Cyanophyceae	Chroococcidiopsidales	Chroococcidiopsidaceae	Chroococcidiopsis	not identified	BG11 liquid medium	CDM (PCR)	Outdoors	Spain	green	Miller et al., 2009 [64]
Cathedral of Seville	Cyanobacteria	Cyanophyceae	Pseudanabaenales	Leptolyngbyaceae	Leptolyngbya	not identified	BG11 liquid medium	CDM (PCR)	Outdoors	Spain	green	Miller et al., 2009 [64]
Cathedral of Seville	Cyanobacteria	Cyanophyceae	Pleurocapsales	Hyellaceae	Pleurocapsa	not identified	BG11 liquid medium	CDM (PCR)	Outdoors	Spain	green	Miller et al., 2009 [64]
Cathedral of Granada (Granada)	Cyanobacteria	Cyanophyceae	Chroococcidiopsidales	Chroococcidiopsidaceae	Chroococcidiopsis	not identified	BG11 liquid medium	CDM (PCR)	Outdoors	Spain	green	Miller et al., 2009 [64]
Cathedral of Granada (Granada)	Cyanobacteria	Cyanophyceae	Pleurocapsales	Hyellaceae	Pleurocapsa	not identified	BG11 liquid medium	CDM (PCR)	Outdoors	Spain	green	Miller et al., 2009 [64]
Santa Maria della Pietà	Cyanobacteria	Cyanophyceae	Oscillatoriales	Oscillatoriaceae	Phormidium	not identified	BG11 broth	CDM (PCR)	Indoors	Italy	/	Mascaro et al., 2021 [70]
Santa Maria della Pietà	Cyanobacteria	Cyanophyceae	Pseudanabaenales	Leptolyngbyaceae	Leptolyngbya	not identified	BG11 broth	CDM (PCR)	Indoors	Italy	/	Mascaro et al., 2021 [70]
Santa Maria della Pietà	Cyanobacteria	Cyanophyceae	Pseudanabaenales	Prochlorotrichaceae	Nodosilinea	not identified	BG11 broth	CDM (PCR)	Indoors	Italy	/	Mascaro et al., 2021 [70]
The West Lake area statues	Cyanobacteria	not identified	not identified	not identified	not identified	not identified	none	NGS	Outdoors	China	yellow	Zhu et al., 2023 [6]

Tombstones of the Monumental Cemetery of Milano	Cyanobacteria	not identified	not identified	not identified	not identified	not identified	none	NGS	Outdoors	Italy	/	Gambino et al., 2021 [33]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Parakomarekiella	sesnandensis	liquid BG11 and BG11 (-N) culture media	CDM (PCR)	Indoors	Portugal	green	Soares et al., 2021 [60]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Chlamydomonadales	Chlamydomonadaceae	Heterochlamydomons	inaequalis	liquid BG11 and BG11 (-N) culture media	CDM (PCR)	Indoors	Portugal	green	Soares et al., 2021 [60]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Nostoc	punctiforme	liquid BG11 and BG11 (-N) culture media	CDM (PCR)	Indoors	Portugal	green	Soares et al., 2021 [60]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Komarekiella	atlantica	liquid BG11 and BG11 (-N) culture media	CDM (PCR)	Indoors	Portugal	/	Soares et al., 2021 [60]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Goeter	apudmara	liquid BG11 and BG11 (-N) culture media	CDM (PCR)	Indoors	Portugal	/	Soares et al., 2021 [60]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	Fortieaceae	Roholtiella	edaphica	liquid BG11 and BG11 (-N) culture media	CDM (PCR)	Indoors	Portugal	/	Soares et al., 2021 [60]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	Fortieaceae	Aulosira	laxa	liquid BG11 and BG11 (-N) culture media	CDM (PCR)	Indoors	Portugal	/	Soares et al., 2021 [60]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Mojavia	pulchra	liquid BG11 and BG11 (-N) culture media	CDM (PCR)	Indoors	Portugal	/	Soares et al., 2021 [60]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Desmonostoc	muscorum	liquid BG11 and BG11 (-N) culture media	CDM (PCR)	Indoors	Portugal	/	Soares et al., 2021 [60]

The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Cylindrospermum	majus	liquid BG11 and BG11 (-N) culture media	CDM (PCR)	Indoors	Portugal	/	Soares et al., 2021 [60]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Trichormus	variabilis	liquid BG11 and BG11 (-N) culture media	CDM (PCR)	Indoors	Portugal	/	Soares et al., 2021 [60]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Nostoc	commune	liquid BG11 and BG11 (-N) culture media	CDM (PCR)	Indoors	Portugal	/	Soares et al., 2021 [60]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Halotia	branchonii	liquid BG11 and BG11 (-N) culture media	CDM (PCR)	Indoors	Portugal	/	Soares et al., 2021 [60]
Coimbra's hypogean Roman cryptoporticus	Cyanobacteria	Cyanophyceae	Oscillatoriales	Coleofasciculaceae	Geitlerinema	not identified	liquid BG11 and BG11 (-N) culture media	CDM (DNA barcode PCR)	Indoors	Portugal	/	Soares et al., 2021 [60]
Coimbra's hypogean Roman cryptoporticus	Cyanobacteria	Cyanophyceae	Nostocales	Symphonemataceae	Mastigocladopsis	not identified	liquid BG11 and BG11 (-N) culture media	DNA barcode PCR	Indoors	Portugal	/	Soares et al., 2021 [60]
Coimbra's hypogean Roman cryptoporticus	Cyanobacteria	Cyanophyceae	Oscillatoriales	not identified	not identified	not identified	liquid BG11 and BG11 (-N) culture media	DNA barcode PCR	Indoors	Portugal	/	Soares et al., 2021 [60]
Coimbra's hypogean Roman cryptoporticus	Cyanobacteria	Cyanophyceae	Pleurocapsales	Hyellaceae	Pleurocapsa	not identified	liquid BG11 and BG11 (-N) culture media	DNA barcode PCR	Indoors	Portugal	/	Soares et al., 2021 [60]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Nostoc	punctiforme	liquid BG11 culture medium	CDM (PCR)	Indoors	Portugal	green/dark-green	Soares et al., 2019 [72]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Nostoc	not identified	liquid BG11 culture medium	CDM (PCR)	Indoors	Portugal	green/dark-green	Soares et al., 2019 [72]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Synechococcales	Merismopediaceae	Aphanocapsa	musciola	liquid BG11 culture medium	CDM (PCR)	Indoors	Portugal	green/dark-green	Soares et al., 2019 [72]

The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Synechococcales	Merismopediaceae	Aphanocapsa	not identified	liquid BG11 culture medium	CDM (PCR)	Indoors	Portugal	green/dark-green	Soares et al., 2019 [72]
The Old Cathedral of Coimbra	Cyanobacteria	Cyanophyceae	Pseudanabaenales	Leptolyngbyaceae	Leptolyngbya	not identified	liquid BG11 culture medium	CDM (PCR)	Indoors	Portugal	green/dark-green	Soares et al., 2019 [72]
Mayan monuments in Uxmal	Cyanobacteria	Cyanophyceae	Chroococcales	Aphanothecaceae	Halotheca	not identified	none	NGS	Outdoors	Mexico	green/dark-green	Ortega-Morales et al. 2004 [17]
Mayan monuments in Uxmal	Cyanobacteria	Cyanophyceae	Chroococcales	Aphanothecaceae	Eualotheca	not identified	none	NGS	Outdoors	Mexico	white	Ortega-Morales et al. 2004 [17]
Acropolis at Ek' Balam, Yucatan	Cyanobacteria	not identified	not identified	not identified	not identified	not identified	none	NGS	Outdoors	Mexico	/	McNamara et al., 2006 [36]
Acropolis at Ek' Balam, Yucatan	Cyanobacteria	Cyanophyceae	Pseudanabaenales	Leptolyngbyaceae	Leptolyngbya	not identified	none	NGS	Outdoors	Mexico	/	McNamara et al., 2006 [36]
Acropolis at Ek' Balam, Yucatan	Cyanobacteria	Cyanophyceae	Synechococcales	Acaryochloridaceae	Acaryochloris	marina	none	NGS	Outdoors	Mexico	/	McNamara et al., 2006 [36]
Acropolis at Ek' Balam, Yucatan	Cyanobacteria	Cyanophyceae	Oscillatoriales	Oscillatoriaceae	Lyngbya	not identified	none	NGS	Outdoors	Mexico	/	McNamara et al., 2006 [36]
Santa Clara-a-Velha Monastery	Cyanobacteria	Cyanophyceae	Pleurocapsales	Hyellaceae	Pleurocapsa	not identified	liquid medium BG11	CDM (PCR)	Outdoors	Portugal	green	Miller et al., 2008 [63]
Santa Clara-a-Velha Monastery	Cyanobacteria	Cyanophyceae	Pseudanabaenales	Leptolyngbyaceae	Leptolyngbya	not identified	liquid medium BG11	CDM (PCR)	Outdoors	Portugal	green	Miller et al., 2008 [63]
Historical building in Ouro Preto	Cyanobacteria	Cyanophyceae	Chroococcidiopsidales	Chroococcidiopsidaceae	Chroococcidiopsis	not identified	Modified Knop's Medium	CDM (PCR)	Outdoors	Brazil	/	Crispim et al., 2006 [14]
Historical building in Ouro Preto	Cyanobacteria	Cyanophyceae	Pseudanabaenales	Leptolyngbyaceae	Leptolyngbya	not identified	Modified Knop's Medium	CDM (PCR)	Outdoors	Brazil	/	Crispim et al., 2006 [14]
Historical building in Porto Alegre	Cyanobacteria	Cyanophyceae	Pseudanabaenales	Leptolyngbyaceae	Leptolyngbya	not identified	Modified Knop's Medium	CDM (PCR)	Outdoors	Brazil	/	Crispim et al., 2006 [14]
Historical building in Porto Alegre	Cyanobacteria	Cyanophyceae	Oscillatoriales	Oscillatoriaceae	Plectonema	not identified	Modified Knop's Medium	CDM (PCR)	Outdoors	Brazil	/	Crispim et al., 2006 [14]
Historical building in Porto Alegre	Cyanobacteria	Cyanophyceae	Oscillatoriales	Oscillatoriaceae	Lyngbya	not identified	Modified Knop's Medium	CDM (PCR)	Outdoors	Brazil	/	Crispim et al., 2006 [14]
Historical building in Ouro Preto	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Nostoc	not identified	Modified Knop's Medium	CDM (PCR)	Outdoors	Brazil	/	Crispim et al., 2006 [14]
Historical building in Sao Paulo	Cyanobacteria	Cyanophyceae	Nostocales	Nostocaceae	Nostoc	not identified	Modified Knop's Medium	CDM (PCR)	Outdoors	Brazil	/	Crispim et al., 2006 [14]
Historical building in Porto Alegre	Cyanobacteria	Cyanophyceae	Nostocales	Tolypothrichaceae	Tolypothrix	not identified	Modified Knop's Medium	CDM (PCR)	Outdoors	Brazil	/	Crispim et al., 2006 [14]

Historical building in Porto Alegre	Cyanobacteria	Cyanophyceae	Nostocales	Scytonemataceae	Scytonematopsis	not identified	Modified Knop's Medium	CDM (PCR)	Outdoors	Brazil	/	Crispim et al., 2006 [14]
Historical building in Porto Alegre	Cyanobacteria	Cyanophyceae	Nostocales	Scytonemataceae	Scytonema	not identified	Modified Knop's Medium	CDM (PCR)	Outdoors	Brazil	/	Crispim et al., 2006 [14]
Historical building in Ouro Preto	Cyanobacteria	Cyanophyceae	Nostocales	Chlorogloeopsidaceae	Chlorogloeopsis	not identified	Modified Knop's Medium	CDM (PCR)	Outdoors	Brazil	/	Crispim et al., 2006 [14]
Austrian petroglyphs from Hallstatt-Dachstein/ Salzkammergut	Cyanobacteria	Cyanophyceae	Chroococcales	not identified	not identified	not identified	none	Nanopore sequencig	Outdoors	Austria	dark green	Rabbachin et al., 2023 [15]
Austrian petroglyphs from Hallstatt-Dachstein/ Salzkammergut	Cyanobacteria	Cyanophyceae	Chroococcidiopsidales	not identified	not identified	not identified	none	Nanopore sequencig	Outdoors	Austria	green	Rabbachin et al., 2023 [15]
Austrian petroglyphs from Hallstatt-Dachstein/ Salzkammergut	Cyanobacteria	Cyanophyceae	Nostocales	not identified	not identified	not identified	none	Nanopore sequencig	Outdoors	Austria	light green, orange and green	Rabbachin et al., 2023 [15]
Austrian petroglyphs from Hallstatt-Dachstein/ Salzkammergut	Cyanobacteria	Cyanophyceae	Oscillatoriales	not identified	not identified	not identified	none	Nanopore sequencig	Outdoors	Austria	dark green	Rabbachin et al., 2023 [15]
Austrian petroglyphs from Hallstatt-Dachstein/ Salzkammergut	Cyanobacteria	Cyanophyceae	Pleurocapsales	not identified	not identified	not identified	none	Nanopore sequencig	Outdoors	Austria	dark green	Rabbachin et al., 2023 [15]
Austrian petroglyphs from Hallstatt-Dachstein/ Salzkammergut	Cyanobacteria	Cyanophyceae	Pseudanabaenales	not identified	not identified	not identified	none	Nanopore sequencig	Outdoors	Austria	green	Rabbachin et al., 2023 [15]
Austrian petroglyphs from Hallstatt-Dachstein/ Salzkammergut	Cyanobacteria	Cyanophyceae	Synechococcales	not identified	not identified	not identified	none	Nanopore sequencig	Outdoors	Austria	green	Rabbachin et al., 2023 [15]
Assyrian palace in Tel Megiddo	Cyanobacteria	not identified	not identified	not identified	not identified	not identified	none	NGS	Outdoors	Israel	/	Zhang et al., 2023 [66]