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Keywords: high status Aegean marble, local marble, pre-eminence of Caesarea, Theveste.

Parole chiave: : marmo Egeo di alto status, marmo locale, preminenza di Caesarea, Theveste.

Abstract: Colored marble columns shafts must have been the single most costly item per unit in an ancient Roman building, and they would have been a special source of both beauty and prestige. In Roman times, prestigious materials were connected not only with wealth but also with high status. Furthermore, for audiences in the western Mediterranean especially, the Eastern provenances of most of elite marbles gave them added associations of Roman grandeur and conquest. Algeria, encompassing much of ancient Numidia and Mauretania, gives a vivid demonstration of the association of status and imported marble column shafts. Caesarea, modern Cherchel, outshines all other Algerian sites in its wealth of imported colored shafts. This superiority is clearly connected with its political status as capital, first of the Mauretanian kingdom and later of the Roman province of Mauretania Caesariensis. Imported shafts also conferred status and beauty in some Algerian sites, but they seem to be extremely scarce at Cherchel, as if to confirm their secondary rank. Throughout Algeria colored limestone shafts were also used as supplements or substitutes for colored marble.

I fusti in marmo colorato devono essere stati l'articolo singolo più costoso per unità nell'ambito di un edificio romano e, in quanto tali, costituirebbero una fonte speciale di bellezza e prestigio. In epoca romana i materiali di prestigio non erano connessi solo sono con il benessere economico ma anche con un alto status sociale. Inoltre, soprattutto per il pubblico del Mediterraneo occidentale, la provenienza orientale di molti dei marmi più pregiati aggiungeva loro l'unione dei concetti di romana grandezza e conquista. L'Algeria, abbracciando molta parte dell'antica Numidia e Mauretania, da una viva dimostrazione dell'associazione tra status e fusti d'importazione in marmo colorato. Caesarea, l'odierna Cherchel, mette in ombra tutti gli altri centri algerini con tutta la sua ricchezza di marmi colorati importati. Questa superiorità è chiaramente connessa con il suo status politico di capitale, prima del regno di Mauretania e poi della provincia romana di Mauretania Caesariensis. I fusti importati appaiono anche in altre città algerine ma molto più raramente, come sembra di poter vedere. I fusti in marmo colorato locale conferiscono status e bellezza ad alcune città d'Algeria ma sembrano essere molto rari a Cherchel, come a voler confermare la loro importanza secondaria. In tutta l'Algeria i fusti in calcare colorato erano anche utilizzati come supplemento o sostituzione per quelli in marmo colorato.

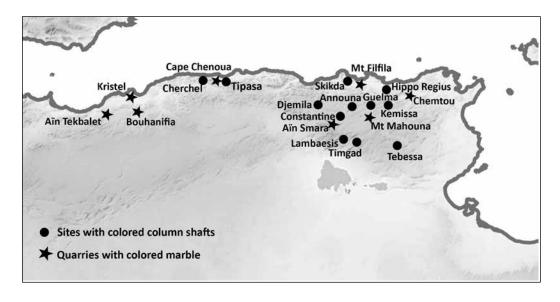
In general, we have identified international colored marbles by eye and with the help of experienced friends, in particular, Matthias Bruno. We have also made use of laboratory science. We have extensively analyzed many well-known Algerian quarries of colored marble and travertine at the University of South Florida (USF)¹ and can here present a diagram with a new, more complete set of isotopic results (fig. 17). Fabrizio Antonelli, Lorenzo Lazzarini, and Stefano Cancelliere have already done important work on the colored marble in the Algerian city of Djemila². As part of a large international team, they have also explored the countryside around Djemila in search of local sources

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¹ For an earlier stage of work, see HERRMANN *et al.* 2013.

² Antonelli, Lazzarini, Cancelliere 2010.

Fig. 1. Quarries of colored marble and sites with colored marble column shafts in Algeria



of stone³. In our survey of Algerian quarries and sites, we have examined colored marble column shafts throughout the country and have determined the ratios of stable isotopes of carbon and oxygen for a few of the imported and many of the local column shafts (Appendix I). For the locations of the sites and quarries, see figure 1. Our laboratory analyses, however, suffer both from a shortage of isotopic and other analytic data on the quarries of colored (as opposed to white) marble in the Aegean area and from the Romans' apparent use of now-unknown Algerian quarries. The present collection cannot therefore pretend to be complete or unerringly accurate, but it aspires to give a general orientation on the use of colored marble shafts (with the omission of dark gray shafts) throughout Algeria.

Imported marbles

Colored marble bursts onto the scene late in the history of the Mauretanian kingdom, when Augustus regarded King Juba II as an important ally. With the Emperor's favor, Juba was able to engage in a major building program and had access to virtually all the major sources of colored column shafts throughout the Roman Empire at that time. A great range of imported marble types can be identified macroscopically in the theatre at Caesarea, constructed during Juba's reign⁴. From relatively nearby came *giallo antico* (*marmor numidicum*), quarried at Chemtou, Tunisia, then in the Roman province of Africa Proconsularis (USF 10974)⁵. From Asia Minor came *africano* (*marmor luculleum*) and *pavonazzetto* (*marmor phrygium*). From the Greek islands came *portasanta* (*marmor chium*) (USF 10953-4, 10973) and *cipollino* (*marmor carystium*). These colorful shafts would have been used primarily in the theatre's stage building, which has been reconstructed on paper with three tiers of 28 columns each⁶.

Other Asiatic marbles used for column shafts at Caesarea were *broccatellone* from Gerence Bay, Karaburun Peninsula (USF 9316)⁷ and *alabastro fiorito* from Hierapolis (USF 10965) (fig. 2)⁸. Some of these column shafts may have come to Caesarea after 44 CE, when the city became capital of the Roman province of Mauretania Caesariensis.

³ Dessandier *et alii* 2012.

⁴ The richness of the marble shafts is mentioned by the excavator but ascribed to the nearby breccia quarries of Cape Chenoua: Ballu 1916. Recently some are said to be "porphyre vert et rose" and "marbre vert et blanc du Chenoua": BLAS DE ROBLÈS, SINTES 2003, 34.

⁵ For this and other internationally-used marbles, see R. Gnoli 1971/1988; BORGHINI 1989.

⁶ VERITÉ 2003, 278-280. He does not mention the colored marbles.

⁷ Bruno et al. 2012, 568-569, fig. 8.

⁸ Identified by Matthias Bruno. Compare Bruno, M. 2002.

In our experience, almost half of these marble types - three of the seven - do not appear in column shafts elsewhere in Algeria (table 1); unique to Caesarea are *africano*, *pavonazzetto*, and *alabastro orientale*. Three of the four other marbles are rare elsewhere. *Broccatellone* appears in a column shaft reused in the South Church at Announa (fig. 3). *Giallo antico* shafts have been identified only in Kemissa (Thubursicum Numidarum) near the frontier with Tunisia, where they have an unusual form. The shafts were not monolithic but built up of tall drums (fig. 4)⁹. The rough surfaces suggest that the temple may have been left unfinished. The isotopic ratios of the stone (USF 10843)¹⁰ are rather distant from the data on Chemtou, but this may reflect incomplete analysis of the Chemtou quarries. The strong, unbroken yellow color of the stone can be better matched at Chemtou than in the travertine/alabaster quarries of Aïn Smara, suggested by the stone's isotopic ratios, or in the yellow marble quarry of Kristel.

Portasanta appears only at Cherchel and Tebessa (ancient Theveste) (USF 9346,10953-4, 10973). The only relatively widespread kind of imported colored marble

City	Giallo antico	Afri- cano	Pavona- zzetto	Brocca- tellone	Alabastro orientale	Porta- santa	Cipol -lino	Breccia corallina	Aswan granite
Cherchel	x	x	x	x	x	x	x		
Tebessa						x	x	x	
Kemissa	x								
Skikda							x		x
HippoRegius							x		
Announa				х			х		
Djemila							x		

Table 1: colored marble column shafts in Algeria: from non-Algerian quarries

Table 2: colored	l marble column	ı shafts in	Algeria	f r om local	auarries
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					-			
City	Bou	yellow	Black-	Reseda	Onyx	Onyx	Aïn	Local breccia
	Hanifia	Kristel?	veined	Filfila	dorée	white &	Tekbal	Kristel?
			Filfila			faint pink	et	Chenoua?
Timgad	x			x				
Tipaza		x		x				
Lambaesis			x					
Djemila				x				x
Constantine					x			
Kemissa							x	
Announa								x
Guelma						x		x
Skikda								x
Hippo								x
Regius								
Cherchel				x				

shaft is *cipollino*, which appears in six different ancient cities of Algeria. One case is truly impressive: the shafts of the temple of Tebessa (USF 9360)¹¹. Sandstorms have turned their surface brown, but their green cores, as well as their isotopic ratios, are unmistakablely *marmor carystium* (fig. 5)¹².

In terms of imported colored shafts, Tebessa/Theveste is the second most important Algerian city (table 1). It also has shafts of *breccia corallina* from Vezirhan, Turkey, as is confirmed by both macroscopic and isotopic evidence (USF9354-5)¹³. Shafts of this breccia are missing at Cherchel.

⁹ Gsell, Joly 1914, 65; Blas de Roblès, Sintes 2003, 217.

¹⁰ HERRMANN *et al.* 2013, 1335, table 1, fig. 3.

¹¹ BLAS DE ROBLÈS, SINTES 2003, 223-5; columns described as "marbre blanc vené de bleu".

¹² HERRMANN *et al.* 2013, 1333-4, table 1, fig. 4.

¹³ HERRMANN et al. 2013, 1333-4, table 1, fig. 3. Data compared with LAZZARINI 2002.

Fig. 2. Column drum of *alabastro fiorito*; West Baths, Cherchel. Black surface staining partially removed.

Fig. 3. Column shaft of *broccatellone*, partially cleaned; South Church, Announa.



The identification of *breccia corallina* imported from Asia Minor poses special problems since somewhat similar red and cream-colored breccias were quarried at Kristel, Chenoua, and perhaps other sites in Algeria. The isotopic signatures of the various Asiatic *breccia corallina* varieties in Turkey are very imperfectly known¹⁴, and isotopic studies of *breccia corallina* shafts in Algeria suffer from this lack of reference data. Several *breccia corallina*-type shafts in Algeria have been been considered local because of uncertainty about their origin.

A red Aswan granite shaft is in the theatre at Skikda (ancient Rusicade).Where colorful imported shafts remain in their original context, they are connected with important public structures, such as the theatre at Caesarea and the temples at Tebessa and Kemissa. These attractive materials, of course, were very often reused in Christian churches.

Local Marbles

Column shafts of colored limestones probably of local origin were frequently used in Algeria, particularly at inland or frontier sites, such as Djemila¹⁵, Tebessa, and Thamugadi (Timgad) (USF 10857, 10870 10900), and shafts of more crystalline marble are spread widely but thinly in the eastern half of the country (fig. 1). The geographic distribution is somewhat surprising since marble quarries are found in both the eastern and the western parts of the country. Column shafts of local colored marbles also seem to be restricted to relatively important buildings. Shafts of *alabastro a pecorella* from western Algeria framed niches in the triumphal gateway in the eastern city of Timgad (Thamugadi)¹⁶. The presence of this rare and colorful stone, which was prized at Rome, probably reflects the high importance attached to the structure by the imperial administration¹⁷.

A fragment of an elliptical yellow marble shaft in the *nymphaeum* at Tipasa may have been from Kristel. The other shafts in this conspicuous structure seem to be gray. The (possibly) Kristel shaft could have provided an accent of color and would have evoked prestigious imported *giallo antico*.

At times, local marbles with minimal color were used to evoke colorful imported marbles. This appears to have been the case at the Large Baths in the frontier city of Lambaesis, near Thamugadi. Two fragmentary fluted and reeded piers, which were probably intended to flank niches at an upper level, are white with black veining (fig. 6). The marble comes from Mt. Filfila (USF 10878), but its veining resembles that of *pavonazzetto* and suggests that the stone was selected as a substitute for fluted *pavonazzetto* columns.

¹⁴ On sources of Breccia corallina, see LAZZARINI 2002, 59, pl. 1; BRUNO et al. 2012, 569-70, figs. 7, 9.

¹⁵ DESSANDIER *et al.* 2012, 71, lithotypes 5, 7, 9, whose sources could not be located.

¹⁶ HERRMANN et al. 2012, 465, fig. 9; HERRMANN et al. 2013, 1339.

¹⁷ HERRMANN *et al.* 2014.



The Large Baths of Lambaesis have an axially symmetrical; "Imperial" design¹⁸ and clearly were an important project. The main load-bearing columns were local stone, but these smaller, decorative marbles gave the building the illusion of imported luxury.

A pair of shafts with a network of delicately colored wiggling lines was used in an apsed hall at Thamugadi (figs. 7-9). The stone is rather similar to *campan verte* from southern France, but it could also be a variety of Filfila marble that in modern times is called *reseda*; the colors tend to vary from brown to greenish (*reseda marron, reseda vert*). The isotopic ratios of the marble provide support for either identification (USF 1063-4). The columns are used in a rather ramshackle assemblage of rooms and courtyards attached to the city walls outside the north gate. Two of the rooms are apsed halls, only one of which has *reseda* columns. In 1978 Mounir Bouchenaki tentatively identified the structure as the offices of the *Annona*¹⁹. An interpretation as a lesser administrative building seems plausible. At Tipasa a dull shaft with the veining patterns of *reseda* formerly lay on the road between the nymphaeum and the theatre (USF 9350). A shaft of *reseda vert* appears in secondary use in the crypt of the Cresconius Basilica in Djemila (USF 10891) (fig. 10). Its greenish-gray veining recalls that of *cipollino*.

There evidently were a multitude of sources of onyx marble used on occasion in ancient Algeria. A small column of *onyx dorée* from Aïn Smara is in the museum at the nearby city of Constantine (USF 10910) (fig. 11). *Onyx dorée* has a strong resemblance to Egyptian alabaster. A badly stained shaft at Thubursicum Numidarum (Kemissa) in eastern Algeria has conspicuous undulating bands somewhat like *alabastro fiorito* (fig. 2). It also resembles onyx marble/travertine from the relatively nearby quarries of Mt. Mahouna, but its isotopic signature indicates that it came from Aïn Tekbalet in western Algeria (USF 10844) (fig. 12). Columns from Mahouna with similar undulating bands were used in the *Domus* of the Antistii at Announa, where they were plastered over and

Fig. 4. Column drum of *giallo antico*; Old Forum, Kemissa, USF 10843.

Fig. 5. Shaft of *cipollino*; Temple of Hercules and Bacchus, Tebessa, USF 9360

Fig. 6. Pier shaft of Filfila marble: "pseudopavonazzetto"; Large Baths, Lambaesis, USF 10878.

Figs. 7-9. Shafts of *reseda* from Mt. Filfila in Offices of the Annona, Timgad (Thamugadi), USF 1063-4.

¹⁸ Krencker 1929, fig. 295.

¹⁹ BOUCHENAKI 1978, p. 39, n. 2.

Fig. 10. Shaft of *reseda vert* from Filfila, crypt of Cresconius Basilica, Djemila, USF 10891.

Fig. 11. Column shaft of *onyx dorée* from Aïn Smara, Cirta Museum, Constantine, USF 10910.

Fig. 12. Shaft of onyx marble with surface staining from Aïn Tekbalet, Kemissa, USF 10844.

Fig. 13. Shaft probably of breccia from Cape Chenoua, South Church, Announa.



painted (USF 9380)²⁰. The Thubursicu column, however, is so finely profiled that it is unlikely to have been coated. A small shaft in Guelma is onyx marble with faint pinkish gray and cream-colored bands; it comes from an unknown quarry, judging by its isotopic signature (USF 10833).

Some brecciated columns resemble *breccia corallina* and might have been local substitutes for it. Examples appear at Skikda and Announa (USF 10853, 10941-2)²¹. The isotopic ratios of the Skikda shaft fall fairly near the Kristel field (fig. 17). The red-and-gray breccia of a shaft at Announa resembles the breccia of Cape Chenoua (fig. 13). At Hippo, a breccia shaft with yellow and pink clasts in a brick-red matrix (fig. 14) can be paralleled in some parts of the Kristel quarries. Three shafts in the crypt of the Cresconius Basilica at Djemila are a light-pink and rose brecciated limestone (USF 10892-4) (fig.15).²² Another column in the Cresconius crypt is a yellowish-pinkish fossiliferous limestone, which is also used in wall revetments at Djemila (USF 10895) (fig. 16)²³. The isotopic ratios of all four of these shafts in the crypt at Djemila fall within the Kristel field. The Kristel quarries currently produce a harder more crystalline marble, but it seems possible that the Djemila shafts come from areas of the quarry not worked in modern times. From its appearance, the fossiliferous limestone might also come from the Broccatello quarries of Tortosa, Spain²⁴.

These shafts in local marble or partially marbleized limestone testify to the variety of efforts in ancient Algeria to find substitutes for imported colored marble shafts or, at any rate, to imitate them. It is striking, however, that no steady local production of shafts emerges; the stones appear sporadically, and the colors and textures usually vary from one shaft to the next. There seems to be little connection between locations of quarries and findspots of shafts. It seems possible that a significant production developed at Kristel,

²² A shaft in the Jardin Archéologique at Guelma might be this same breccia.

²⁰ GSELL, JOLY 1918, 82.

²¹ HERRMANN *et al* 2013, 1334-6, fig. 3, Tab. 1.

²³ Antonelli, Lazzarini, Cancelliere 2010, 480-1, fig. 4c.

²⁴ Matthias Bruno, personal communication, 2015 01 14. The impression is shared by Anna Gutierrez Garcia-M, noting both similar stone in the upper layers of the quarry at Tortosa but also a general lack of column shafts in Broccatello: email 2015 01 15.



but this requires further verification. The differences between modern and (hypothetical) ancient production at Kristel could be due to imitation of prestigious eastern marble types during Roman times. More isotopic testing will be needed to resolve such issues.

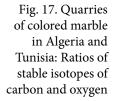
It is clear, however, that both local and imported colored marble shafts belonged to the realm of ambitious, high-status projects. On the other hand, it is also striking how builders at Caesarea avoided using colored column shafts of local origin. Construction at Caesarea made abundant use of local gray and brown sandstones and limestones, but when it came to colorful column shafts, the capital city restricted itself to imported marbles. More than wealth seems to have been involved in this exclusion. Perhaps the imperial associations of the imported marbles were prized and deemed suitable for the seat of government. It certainly appears as if shafts of local colored stones were considered unworthy of it.

Acknowledgments:

Our thanks to the Ministry of Culture of Algeria, to Mourad Betrouni, director of Patrimoine Culturel, and to Mohamed Dahmani, Algiers. We are also grateful to the Museums of Rusicade (Skikda) and Hippo Regius (Annaba), to Ghania Chakrit (Skikda), and to Mahieddine Chebli (Skikda). Fig. 14. Shaft probably of breccia from Kristel, Hippo Regius.

Fig. 15. Shaft of pink breccia, possibly from Kristel, Cresconius Basilica at Djemila, USF 10892-4.

Fig. 16 . Shaft of fossiliferous limestone, Cresconius Basilica at Djemila, USF 10895.



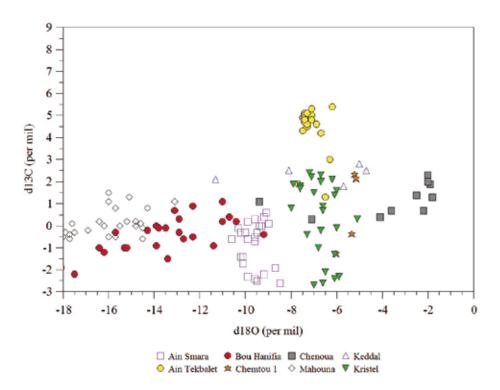


Table 3: Isotopic analysis of marble by Robert H. Tykot, University of South Florida (USF); description and attribution by John J. Herrmann, Jr.

(our), description and attribution by joint j. Herrinani, jr.								
USF #	Location & #	δ13C VPDB ‰	δ18O VPDB ‰	description	figure	Quarry attribution		
5472	Ostia Mus. 18590	3.4	-11.6		Fig. 7	Cap de Garde		
9343	Hippo Mus.	3.9	-8.1		Fig. 14	Cap de Garde		
10918	Skikda Mus. CH.SK.051	2.7	-4.3		Fig. 22	Mt. Filfila		
10939	Skikda Theatre C28	2.6	-5.3	Schematic type IX fragment		Mt. Filfila		
10941	Skikda Theatre C31	3.1	-6.6	Schematic type VIII fragment		Mt. Filfila		
10942	Skikda Theatre C47	2.3	-5.5		Fig. 9	Mt. Filfila		
10947	Skikda Theatre	0.8	-6.7		Fig. 18	Mt. Filfila		

Table 4: Isotopic analysis of marble by Julia E. Cox, University of Georgia; description and attribution by John J. Herrmann, Jr.

UGA #	Location	δ13C VPDB ‰	δ18O VPDB ‰	Maximum grain size	figure	Quarry attribution
C1407001	El Djem, Tunisia Museum	4.28	-6.36	1.2 mm	Fig. 10	Mt. Pentelikon

The combination of isotopic ratios and small mgs strongly indicates a provenance from Mt. Pentelikon. The marble also seems to display foliation (parallel layering), which tends to corroborate the Pentelic identification.

Appendix I: Isotopic analysis of Algerian column	shafts at the University of South Florida (USF)
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~~					at the University of South Florid	
USF #	d13C		MGS	Museum/Collection/Co	Description	quarry assignment
9316	-3.0	-13.3		Cherchell Piazza	Breccia shaft with light gray and light yellowish-rose clasts in darker rose matrix, white veins.	Broccatellone, Karaburun peninsula,Turkey
9346	2.4	-2.7		Tebessa Museum	Cipollino shaft	Karystos, Greece
350	1.7	-4.1		Tipaza, formerly street in	shaft in street in front of	Reseda of Mt. Filfila
				front of Nymphaeum	Nymphaeum. Dull white with network of grey veins. Skikda/Filfila?	
354	1.3	-4.2		Tebessa Basilica	Pale breccia corallina shaft, S colonnade, 3rd from E	Breccia corallina, Vezirhan, Turkey
355	1.2	-3.6		Tebessa Museum	(Tebessa Temple Exterior) Breccia corallina column shaft. Paler than the usual Breccia corallina?	Breccia corallina, Vezirhan, Turkey
9360	2.6	-2.9		Tebessa Temple	shaft of SE column. veined yellow-greenish brown, brighter green in interior. Cipollino (marmor carystium) impregnated with sand	Karystos, Greece
9380	0.2	-18.6		Guelma Museum col.guel.001	Tuscan column (from Announa, altar of Antistii). Banded travertine. Mahouna??	Mt. Mahouna
10822	2.3	-2.7	.5mm	Tipaza, Temple behind amphitheatre	Spiral-fluted column at left (E) of stairs of temple. Dark gray, like Grise foncé of Filfila. Chip on ground beside column	Mt. Filfila
0833	2.7	-1.7	1	Guelma, Jardin Archeologique	Onyx column shaft near entrance. Onyx dorée? Mahouna?	unknown origin
0843	-1.6	-9.1	.2mm	Kemissa, Old Forum, Temple at West	Piece of Giallo antico column. Dm 84.5 cm.; L 186 cm	Chemtou? Kristel?
0844	4.7	-8.1	.8mm	Kemissa, Between Nouveau Forum and Thermes	Onyx marble column shaft, Dm 36.7 cm. upper Dm ca 37; L ca. 106 cm. Mahouna?	Aïn Tekbalet
0853	5.4	-11.8	1	Announa, Column deposit below S. Church	Breccia corallina" shaft, dm 46.5 cm. A: from white area; B from brown	unknown origin
0857	3.0	-4.0	.5mm	Timgad, Museum	Pink column with white spots; H 127; upper D 30.2 cm.	unknown origin
0863b	2.7	-8.9	.1mm	Timgad, Apsed hall outside N Gate	N. column shaft, upper dm 30 cm. Reseda verte, filfila	Reseda of Mt. Filfila
0864	2.4	-8.8	.1mm	Timgad, Apsed hall outside N Gate	N. column shaft, upper dm 30 cm. Reseda verte, filfila	Reseda of Mt. Filfila
0870	-0.1	-14.9	1	Timgad, Chapel to E of Donatist church	Semicolumn at E end of S aisle, Red and green breccia	unknown origin
0878	1.1	-4.1	2	Lambaesis, Thermes Legionnaires	Fluted pseudo-Pavonazzetto column: fine grain, white with area of large quartz-like crystals and black veins: Filfila???	Mt. Filfila
0891	3.0	-4.2	1	Djemila, Cresconius Basilica, crypt	beautiful Reseda verte shaft. Dm 28.6 cm	Reseda of Mt. Filfila
0892b	-2.0	-6.5	5	Djemila, Cresconius Basilica, crypt	pale cream and pink limestone shaft. Dm 28.5 cm.	Kristel?
0893	-2.0	-6.0	5	Djemila, Cresconius Basilica, crypt	pale cream and pink limestone shaft. Dm 28.5 cm.	Kristel?
0894 0895	-2.4	-7.8 -6.8	1	Djemila, Cresconius Basilica, crypt Djemila, Cresconius	rose and cream breccia limestone shaft. Dm 30.4 cm N. standing column: yellow and	Kristel?
0893	-4.6	-8.7	3	Basilica, crypt Mila,Archaeological office	pink lumachella limestone shaft Column shaft 091: onylx-like	unknown origin
0910b	0.3	-10.5	2	Constantine, Museum	sandstone, resembles Mahouna Yellow and white column shaft:	Onyx dorée of Aïn
0941	2.0	-9.1	4	garden Skikda, Theatre	Onyx dorée? Dm 42 cm Breccia coralliina column shaft	Smara Kristel?
0942b	2.3	-9.2	4	Skikda, Theatre	COL38 Breccia coralliina column shaft	Kristel?
0953	5.6	-5.6	?	Cherchel, Piazza beside	COL38 "Portasanta" shaft at center of	Portasanta, Chios
0954	5.2	-6.1	?	Museum Cherchel, Piazza beside Museum	interior wall; C=183.5 cm. upper part of fluted Portasanta shaft, beside museum; upper dm- 56 cm.	Portasanta, Chios
0965	5.5	-15.8	2	Cherchel, West Baths	Yellow and brown onyx column, C=125 cm. Mahouna?	Alabastro fiorito, Hierapolis,Turkey
		-6.1	1	Cherchel, Crossroads:	Column shaft: Portasanta or	Portasanta, Chios
0973	4.6	-0.1		Nationale/Revolution	Chenuoa	



Abbreviazioni bibliografiche

ANTONELLI, LAZZARINI, CANCELLIERE 2010 = ANTONELLI F., LAZZARINI L., CANCELLIERE S., On the White and Colored Marbles of the Roman Town of Cuicul (Djemila, Algeria), in Archaeometry 52.4, 2010, pp. 575-596.

BALLU 1916 = BALLU A., *Cherchel*, in *BAParis*, 1916, p. 168. http://gallica.bnf.fr/ark:/12148/bpt6k2033441/f283.image.pagination.langEN.

BLAS DE ROBLÈS, SINTES 2003 = BLAS DE ROBLÈS J.M., SINTES C., Sites et monuments antiques de l'Algérie, Aix-en-Provence 2003.

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