

Supplementary Materials:



Figure S1: Image of the experiment of synthesis of antiquity *viride salsum* recipe (TEO)



Figure S2: Image of the experiment the reproduction of cardenillo vermicular recipe (CV). Left: Mixture of sodium chloride, alum and vinegar in a copper bowl. Right: first crystals of the reaction in the copper bowl.

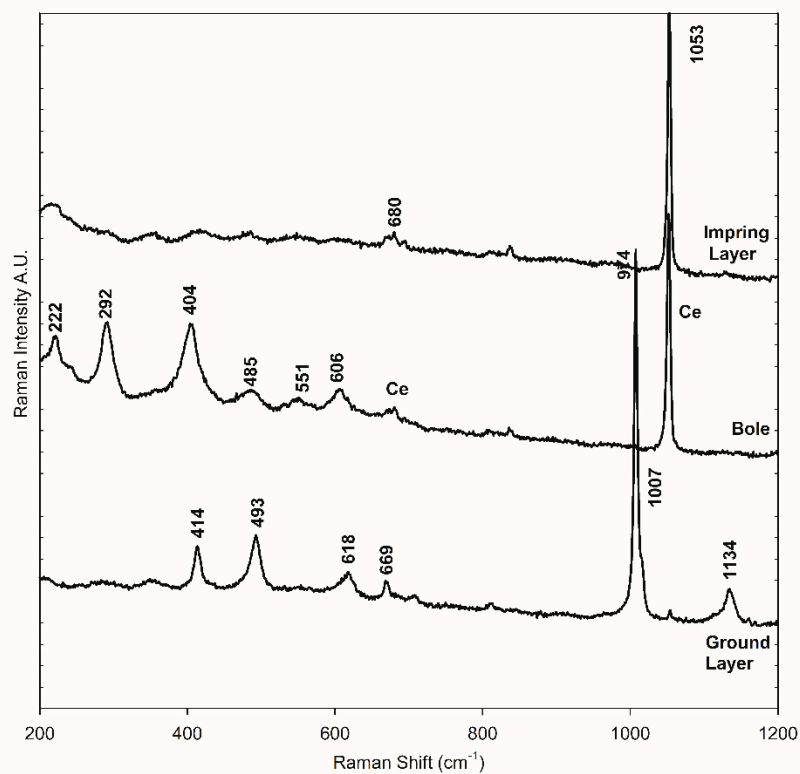


Figure S3: Raman spectra of the ground layer, bole and priming layer in the cross-section of the green sample ANC05.

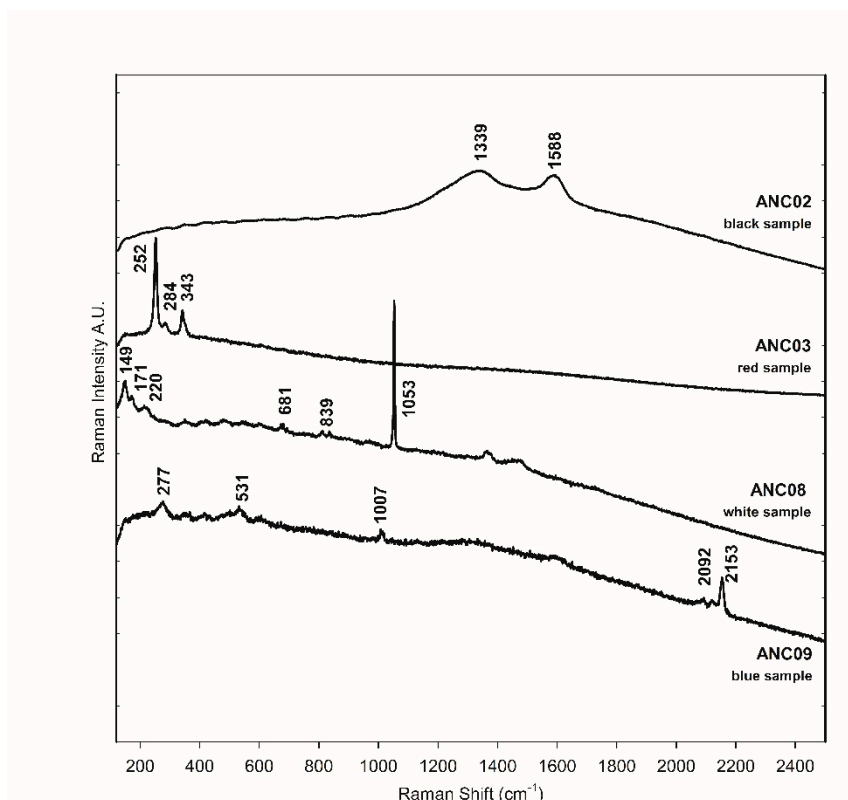


Figure S4: Raman spectra of samples of other colours

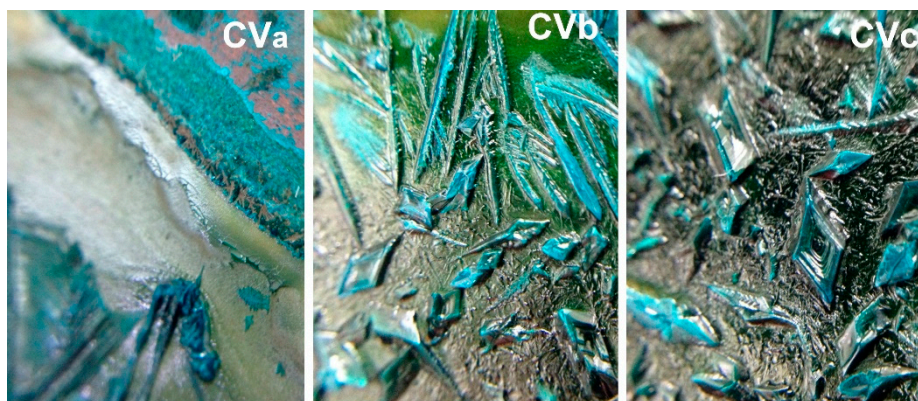


Figure S5: Image of the scratched crystals of the product of the *Cardenillo Vermicular* recipe (CV) on the copper plate.

sample	ANC07		sample	ANC10	
Element	Weight%	Atomic%	Element	Weight%	Atomic%
O K	52.88	75.85	O K	49.00	70.76
Al K	1.76	1.49	Al K	4.87	4.17
Si K	3.31	2.71	Si K	8.17	6.72
S K	2.17	1.55	S K	2.96	2.13
Cl K	12.21	7.91	Cl K	8.55	5.57
K K	0.96	0.56	K K	1.06	0.62
Ca K	0.84	0.48	Ca K	3.17	1.83
Fe K	2.01	0.83	Fe K	2.11	0.87
Cu K	23.86	8.62	Cu K	20.11	7.31
Totals	100.00		Totals	100.00	

Table S1: elemental composition of the ANC07 and ANC10 green layer samples.

	CV a	CV b	CV c
C	46.49	38.88	43.24
O	47.53	52.75	52.77
Cu	5.58	7.85	3.69
Fe	0.24	0.20	0.09
Si	0.07	0	0
Al	0.04	0.10	0.09
Cl	0.03	0.14	0.06
K	0.02	0.04	0.04
S	0	0.04	0.03

Table S2: elemental composition (Atomic %) of the different crystals of the product of the *Cardenillo Vermicular* recipe (CV)