

Supplemental Material 2– D’Agostino et al.

Burial 1		
Sugars		Mannose Lactose
Amino acids		Serine
Fatty acids	Saturated	Butanoic acid Pentanoic acid Tridecanoic acid Hexadecanoic acid Heneicosanoic acid Octacosanoic acid Triacontanoic acid
	Unsaturated	11-Octadecenoic acid
Alcohols		1-Decanol 6-Tridecanol 1-Dodecanol 11-Methyldodecanol
Terpens and terpenoids	Monoterpenes and derivatives	Linalool Citronellol, dihydro
	Sesquiterpenes and derivatives	Nerolidol, hexahydro
Phenolic compounds and derivatives		2,6-Dihydroxybenzoic acid 1,2-Benzenediol Resorcinol
Other markers		Octanal

Burial 2				
Amino acids		Serine		
Fatty acids	Saturated	Hexanoic acid Hexadecanoic acid Tricosanoic acid Pentacosanoic acid Triacontanoic acid		
		Unsaturated	omega-3	Docosa-2,6,10,14,18-pentaen-22-al
			omega-6	9,12-Octadecadienoic acid
			omega-7	11-Octadecenoic acid
			omega-9	9-Octadecenoic acid
Alcohols		Tridecan-1-ol 1-Dodecanol 11-Methyldodecanol		
Terpens and terpenoids	Monoterpenes and derivatives	Pinene		
	Triterpenoids	Tigogenin Tetrahydrosmilagenin		

Burial 3	
Sugars	Galactose

Amino acids		Serine
Fatty acids	Saturated	Hexadecanoic acid Triacontanoic acid
		Unsaturated
		omega-9 9-Octadecenoic acid
Alcohols		1-Octanol 1-Decanol 6-Tridecanol 1-Undecanol 1-Dodecanol 11-Methyldodecanol
Terpens and terpenoids	Monoterpenes and derivatives	Terpinen-4-ol

Burial 4			
Amino acids		Serine	
Fatty acids	Saturated	Tridecanoic acid Hexadecanoic acid Octadecanoic acid Dodecanoic acid Docosanoic acid Triacontanoic acid	
		Unsaturated	omega-3 Doconexent
			omega-7 11-Octadecenoic acid
omega-12 6-Octadecenoic acid			
Alcohols		1-Dodecanol 9-Octadecen-1-ol	
Terpens and terpenoids	Sesquiterpenes and derivatives	Santalol	

Burial 6			
Fatty acids	Saturated	Pentanoic acid Tridecanoic acid Tetradecanoic acid Hexadecanoic acid Octadecanoic acid Heneicosanoic acid Docosanoic acid Hexacosanoic acid Octacosanoic acid Triacontanoic acid	
		Unsaturated	omega-3 2,6,10,14,18-Pentamethyl-2,6,10,14,18-eicosapentaene 5,8,11,14,17-Eicosapentaenoic acid Doconexent
			omega-6 9,12-Octadecadienoic acid
			omega-7 9-Hexadecenoic acid 11-Octadecenoic acid
			omega-9 9-Octadecenoic acid 13-Docosenoic acid

			15-Tetracosenoic acid
		omega-12	6-Octadecenoic acid
Alcohols			1-Dodecanol 3-Dodecanol Tetracosanol-1 Octacosanol
Terpens and terpenoids	Monoterpenes and derivatives		1,2-Dihydrolinalool
	Sesquiterpenes and derivatives		Globulol Epicubebol Azulene, 2,3,3a,4,7,8-hexahydro Azulene, 1,2,3,4,5,6,7,8-octahydro
Phenolic compounds and derivatives			Scopoletin
Other markers			Tartaric acid Pyrogallol

Burial 8			
Amino acids			Lysine
Fatty acids	Saturated		Butanoic acid Tridecanoic acid Hexadecanoic acid Triacontanoic acid
	Unsaturated	omega-3	Docosa-2,6,10,14,18-pentaen-22-al 5,8,11,14-Eicosatetraenoic acid
		omega-7	11-Octadecenoic acid
Alcohols			1-Decanol 1-Dodecanol 9-Octadecen-1-ol
Terpens and terpenoids	Monoterpenes and derivatives		Citronellol Ocimene
	Sesquiterpenes and derivatives		Shyobunol
Other markers			Vitamin E Isothiocyanic acid 2-Decenal 7-Hexadecenal 15-Heptadecenal

Burial 9			
Sugars			Lactose
Amino acids			Serine
Fatty acids	Saturated		Tridecanoic acid Hexadecanoic acid
	Unsaturated		9-Octadecenoic acid
Alcohols			1-Octanol 1-Dodecanol 11-Methyldodecanol
Terpens and terpenoids	Monoterpenes and derivatives		Levomenthol Ocimene

Burial 10			
Amino acids		Serine	
Fatty acids	Saturated	Butanoic acid Tridecanoic acid Hexadecanoic acid Octadecanoic acid Dodecanoic acid Octacosanoic acid	
		Unsaturated	omega-7
		omega-9	9-Octadecenoic acid
Alcohols		1-Octanol 1-Nonanol 1-Decanol 1-Dodecanol 11-Methyldodecanol 11-Tetradecen-1-ol	
Terpens and terpenoids	Monoterpenes and derivatives	Citronellol	

Burial 11			
Amino acids		Serine	
Fatty acids	Saturated	Octadecanoic acid Nonanoic acid Dodecanoic acid Hexadecanoic acid Docosanoic acid Triacontanoic acid	
		Unsaturated	omega-3
		omega-7	11-Octadecenoic acid
Alcohols		1-Decanol 1-Dodecanol 9-Octadecen-1-ol 1-Heptacosanol	
Terpens and terpenoids	Monoterpenes and derivatives	Menthol Levomenthol Citronellol Pennogenin	
Phenolic compounds and derivatives		Phytol	

Burial 12		
Amino acids		Serine
Fatty acids	Saturated	Butanoic acid Tridecanoic acid Hexadecanoic acid Octadecanoic acid
	Unsaturated	9,12-Octadecadienoic acid

Alcohols		11-Methyldodecanol 1-Decanol 1-Dodecanol 9-Octadecen-1-ol
Terpens and terpenoids	Monoterpenes and derivatives	Citronellol

Burial 14		
Sugars		Lactose Galactitol
Amino acids		Serine
Fatty acids	Saturated	Tridecanoic acid Hexadecanoic acid Octadecanoic acid
	Unsaturated	11-Octadecenoic acid
Alcohols		1-Heptanol 1-Dodecanol 11-Methyldodecanol Tetracosanol-1
Terpens and terpenoids	Monoterpenes and derivatives	3-Carene
Alkaloids and derivatives		Papaveroline
Other markers		Hexadecanal

Burial 17			
Sugars		Inositol	
Amino acids		Lysine Serine	
Fatty acids	Saturated	Butanoic acid Dodecanoic acid Tridecanoic acid Hexadecanoic acid Heptacosanoic acid Octadecanoic acid Heneicosanoic acid Triacontanoic acid	
		Unsaturated	omega-3
	omega-7		11-Octadecenoic acid
	omega-9		9-Hexadecenoic acid 13-Docosenoic acid
Alcohols		1-Heptanol 1-Decanol 11-Methyldodecanol 1-Dodecen-3-ol 11-Tetradecen-1-ol	
Alkaloids and derivatives		Ergosine	
Other markers		Thiocyanic acid Isothiocyanate 2-Dodecenal	

Burial 21		
Fatty acids	Saturated	Hexadecanoic acid Octadecanoic acid Dodecanoic acid
Alcohols		1-Decanol 6-Tridecanol 11-Methyldodecanol
Terpens and terpenoids	Monoterpenes and derivatives	3-Carene
Other markers		7-Hexadecenal

Burial 23		
Sugars		Glucopyranose, 1,6-anhydro-
Fatty acids	Saturated	Pentanoic acid Hexadecanoic acid Octadecanoic acid Triacotanoic acid
Alcohols		1-Decanol
Alkaloids and derivatives		Digitoxin

Burial 24		
Fatty acids	Saturated	Dodecanoic acid Hexadecanoic acid Octadecanoic acid
Alcohols		1-Dodecanol 11-Methyldodecanol Eicosen-1-ol
Terpens and terpenoids	Sesquiterpenes and derivatives	Humulol
Phenolic compounds and derivatives		Resorcinol
Other markers		2-Decenal

Burial 25			
Sugars		Fucose Sucrose	
Amino acids		Serine	
Fatty acids	Saturated	Tridecanoic acid Hexadecanoic acid	
	Unsaturated	omega-3	Docosa-2,6,10,14,18-pentaen-22-al
		omega-9	9-Octadecenoic acid
Alcohols		1-Decanol 1-Dodecanol 11-Methyldodecanol 1-Tetradecanol 9-Octadecen-1-ol	

Terpens and terpenoids	Monoterpenes and derivatives	Citronellol
Other markers		Isothiocyanic acid

Burial 26		
Fatty acids	Saturated	Hexadecanoic acid
		Heptacosanoic acid
		Octadecanoic acid
		Heneicosanoic acid
	Docosanoic acid	
	Tricontanoic acid	
Fatty acids	Unsaturated	omega-6
		9,12-Octadecadienoic acid
		omega-7
	11-Octadecenoic acid	
	omega-9	
	9-Octadecenoic acid	
Alcohols		1-Decanol
		11-Methyldodecanol
		Tetracosanol-1

Burial 27		
Amino acids		Serine
Fatty acids	Saturated	Pentanoic acid
		Dodecanoic acid
		Hexadecanoic acid
		Docosanoic acid
	Tricontanoic acid	
Fatty acids	Unsaturated	omega-3
		Docosa-2,6,10,14,18-pentaen-22-al
	omega-9	
	9-Octadecenoic acid	
Alcohols		1-Hexanol
		1-Decanol
		2-Undecen-1-ol
		1-Heptacosanol

Burial 28		
Amino acids		Alanine
		Lysine
		Serine
Fatty acids	Saturated	Butanoic acid
		Hexadecanoic acid
		Octadecanoic acid
	Tricontanoic acid	
	Unsaturated	9-Octadecenoic acid
Alcohols		1-Hexanol
		1-Heptanol
		1-Octanol
		2-Nonen-1-ol
		1-Dodecanol
		11-Methyldodecanol

Alkaloids and derivatives	1H-Isoindole-5-carboxylic acid, 2,3-dihydro-1,3-dioxo 1H-Indole 4-Piperidone
Other markers	2-Dodecenal Decanal Maltol

Burial 29		
Fatty acids	Saturated	Pentanoic acid Hexadecanoic acid Octadecanoic acid Triacontanoic acid
	Unsaturated	7-Hexadecenoic acid
Alcohols		1-Heptanol 1-Nonanol 1-Dodecanol
Terpens and terpenoids	Monoterpenes and derivatives	Ocimene
Phenolic compounds and derivatives		Pyrogallol
Other markers		Tartaric acid 2-Dodecenal

Burial 31		
Sugars		Glucopyranose
Fatty acids	Saturated	Dodecanoic acid Hexacosanoic acid Hexadecanoic acid Octadecanoic acid
	Unsaturated	9-Octadecenoic acid
Alcohols		1-Dodecanol 11-Methyldodecanol 2-Octadecen-1-ol 11-Tetradecen-1-ol 1-Tricosanol
Terpens and terpenoids	Monoterpenes and derivatives	Citronellol
Phenolic compounds and derivatives		1,2-Benzenediol
Other markers		Isothiocyanic acid

Burial 34		
Sugars		Melibiose Lactose
Amino acids		Serine
Fatty acids	Saturated	Dodecanoic acid Tridecanoic acid Hexadecanoic acid Octadecanoic acid Triacontanoic acid

	Unsaturated	9-Octadecenoic acid
Alcohols		1-Decanol 11-Methyldodecanol 9-Octadecen-1-ol 11-Tetradecen-1-ol
Terpens and terpenoids	Sesquiterpenes and derivatives	Sesquithujene
Other markers		Isothiocyanic acid

Burial 36		
Amino acids		Serine
Fatty acids	Saturated	Butanoic acid Hexanoic acid 3-Hydroxydecanoic acid Hexadecanoic acid Octadecanoic acid
	Unsaturated	9-Octadecenoic acid
Alcohols		1-Heptanol 1-Decanol Tridecanol 2-Dodecen-1-ol 1-Hexacosanol Tetracosanol-1
Terpens and terpenoids	Monoterpenes and derivatives	Origanene Linalool
Other markers		Isothiocyanic acid Cymarin

Burial 38		
Fatty acids	Saturated	Hexadecanoic acid Octadecanoic acid Docosanoic acid
Alcohols		1-Pentanol 1-Hexanol 11-Methyldodecanol 1,7-Octanediol

Burial 39		
Amino acids		Serine
Fatty acids	Saturated	Hexadecanoic acid Octadecanoic acid
		Unsaturated
Terpens and terpenoids	Monoterpenes and derivatives	Ocimene Limonen-6-ol Citronellol
Alcohols		1-Heptacosanol

	1-Dodecanol 1-Triacontanol Tetracosanol-1
Other markers	Undecanal

Burial 40		
Sugars		Lactose
Amino acids		Serine
Fatty acids	Saturated	Butanoic acid Heptanoic acid Hexadecanoic acid Octadecanoic acid
	Unsaturated	7-Hexadecenoic acid
Alcohols		1-Hexanol 1-Nonanol Decanol 11-Methyldodecanol
Terpens and terpenoids	Monoterpenes and derivatives	Citronellol
Other markers		Thiocyanic acid

Burial 41		
Sugars		Lactose
Amino acids		Serine
Fatty acids	Saturated	Dodecanoic acid Hexadecanoic acid Octadecanoic acid Cyclopentanetridecanoic acid Pentacosanoic acid Triacontanoic acid
		Unsaturated
		omega-9 9-Octadecenoic acid
Alcohols		1-Octanol 1-Decanol 1-Dodecanol 11-Methyldodecanol 11-Tetradecen-1-ol 9-Octadecen-1-ol
Terpens and terpenoids	Monoterpenes and derivatives	Citronellol Levomenthol