



Supplement of

The Volyn biota (Ukraine) – indications of 1.5 Gyr old eukaryotes in 3D preservation, a spotlight on the “boring billion”

Gerhard Franz et al.

Correspondence to: Gerhard Franz (gefra548@gmail.com, gerhard.franz@tu-berlin.de)

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Table S1: Absorption bands in IR spectra of kerite, chitosan and chitin samples;
 italics – bands observed in spectra of pure cellulose; br – broad, v – very, w – weak,
 sh – shoulder, str - stretch, b – bend

Kerite	Chitosan	Chitin	Assignment	References
<i>br w 3400</i>	<i>br 3400</i>	<i>br 3440 + w sh 3475</i>	<i>O-H str</i>	<i>V, N</i>
b, w sh 3240	sh 3280	3265	N-H str	L, C
-	w sh 3100	3110	N-H str	N
2960, 2930, 2870	2920, 2880	2960, 2930, 2885	C-H str	N, L, V
v br w 2120	v br, w 2090	-	?	-
br 1640	1658	1658	C=O (amide I)	C, L, W
-	-	1623	amide group	L
br sh 1570	1560	1558	N-H ₂ b	C, W, L, N
1450	1417	1417	C-H ₃ b	L, T
<i>w 1380</i>	<i>1380</i>	<i>1378</i>	<i>O-H b, C-H₃ b</i>	<i>Li, Q</i>
-	1318	1314	C-N str (amide II)	V, W
br sh 1250	w 1260	w 1260	C-O-C, C-O-H b	L, V
-	w 1200	w 1205	C-O	L
<i>br sh 1165</i>	<i>1151</i>	<i>1157</i>	<i>C-O-C bridge</i>	<i>C, W, L</i>
-	-	1115	?	-
<i>w sh 1080</i>	<i>br 1080</i>	<i>1076</i>	<i>C-O str</i>	<i>V, W</i>
<i>w 1038</i>	<i>1035</i>	<i>1030</i>	<i>C-C-O, C-O-C ring</i>	<i>M, Li</i>
-	sh 990	w 975	C-C str	L
-	sh 950	954	C-H b	L
-	-	vw 920	?	-
-	<i>w 900</i>	<i>w 900</i>	<i>C-H b</i>	<i>L, N, Q</i>
<i>br w 800</i>	-	<i>750</i>	<i>C-H b</i>	<i>L, N</i>

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