

## Electronic Supplementary Information (ESI)

### Sequential crystallization of high and low melting waxes to improve oil structuring in wax-based oleogels

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*Table S1: Overview of peak melting temperatures and peak crystallization temperatures of wax-based oleogels gelled with one type of wax (5% w/w, 4% w/w, 2.5% w/w and 1% w/w) and of wax-based oleogels gelled with a combination of two waxes in a ratio of 4:1, 2.5:2.5 and 1:4*

Sample	T <sub>m, peak</sub> (high)	T <sub>m, peak</sub> (low)	T <sub>c, peak</sub> (high)	T <sub>c, peak</sub> (low)
5% RBW	68.12 ± 0.06		53.71 ± 0.46	
4% RBW	67.20 ± 0.25		51.02 ± 1.01	
2.5% RBW	66.19 ± 0.32		48.54 ± 0.06	
1% RBW	61.25 ± 0.44		39.49 ± 0.57	
5% SW	63.76 ± 0.23		60.24 ± 0.78	
4% SW	62.36 ± 0.09		58.53 ± 0.53	
2.5% SW	60.00 ± 0.15		54.91 ± 0.86	
1% SW	55.95 ± 0.30		47.53 ± 0.32	
5% BEW		20.50 ± 1.15		11.22 ± 1.31
4% BEW		17.82 ± 0.12		7.39 ± 0.23
2.5% BEW		15.11 ± 0.14		2.74 ± 0.17
1% BEW		12.09 ± 0.23		n.d.
4% RBW – 1% SW	67.26 ± 0.20		54.07 ± 0.22	
2.5% RBW – 2.5% SW	65.79 ± 0.17		54.87 ± 0.05	
1% RBW – 4% SW	64.94 ± 0.24		57.08 ± 0.09	
4% SW – 1% BEW	62.33 ± 0.08	11.34 ± 0.23	58.77 ± 0.05	n.d.
2.5% SW – 2.5% BEW	58.85 ± 1.09	15.23 ± 0.21	54.59 ± 0.92	2.85 ± 0.30
1% SW – 4% BEW	55.64 ± 0.30	17.52 ± 0.21	47.36 ± 1.29	6.22 ± 0.02
4% RBW – 1% BEW	67.71 ± 0.55	12.20 ± 0.47	50.30 ± 1.89	n.d.
2.5% RBW – 2.5% BEW	66.31 ± 0.52	14.17 ± 0.22	48.65 ± 0.81	2.67 ± 0.11
1% RBW – 4% BEW	60.89 ± 0.69	17.09 ± 0.42	39.65 ± 1.59	7.40 ± 0.68

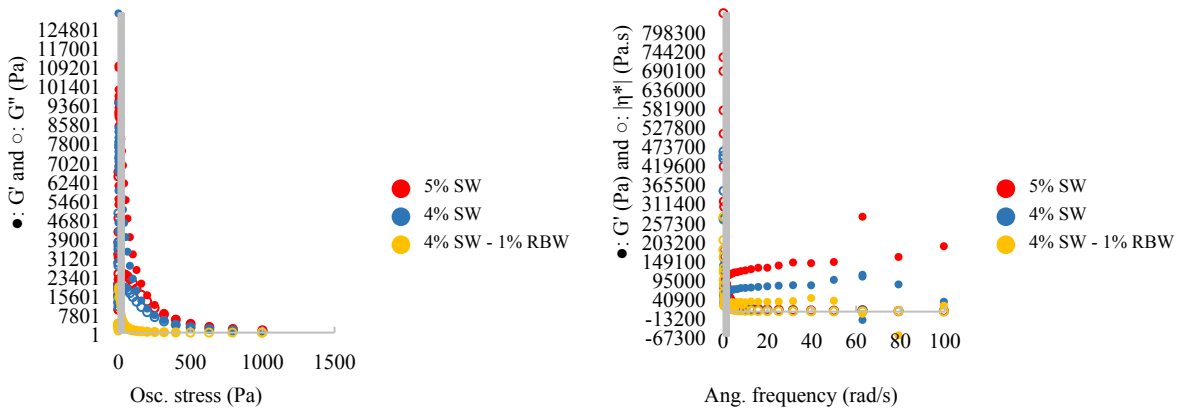


Figure S1: Amplitude sweeps (left) and frequency sweeps (right) of oleogels prepared with 5% SW, 4% SW and 4%SW:1%RBW

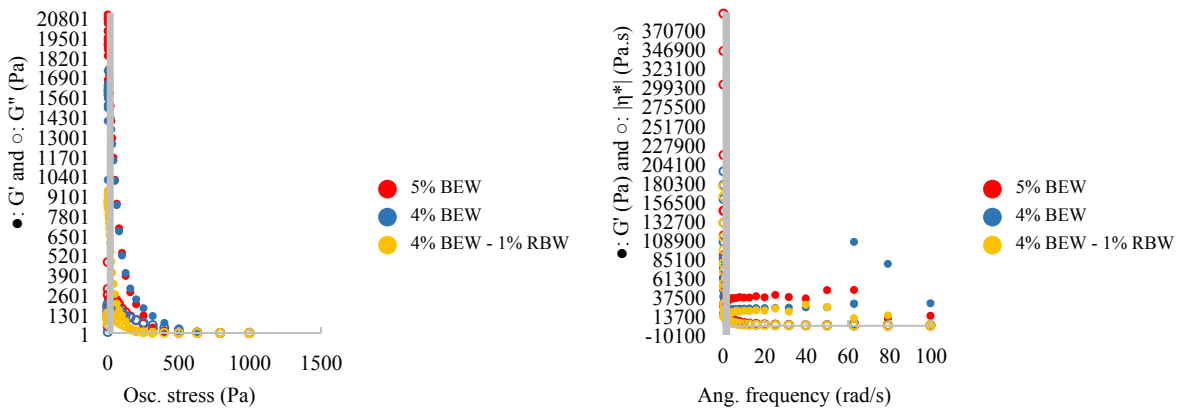


Figure S2: Amplitude sweeps (left) and frequency sweeps (right) of oleogels prepared with 5% BEW, 4% BEW and 4%BEW:1%RBW

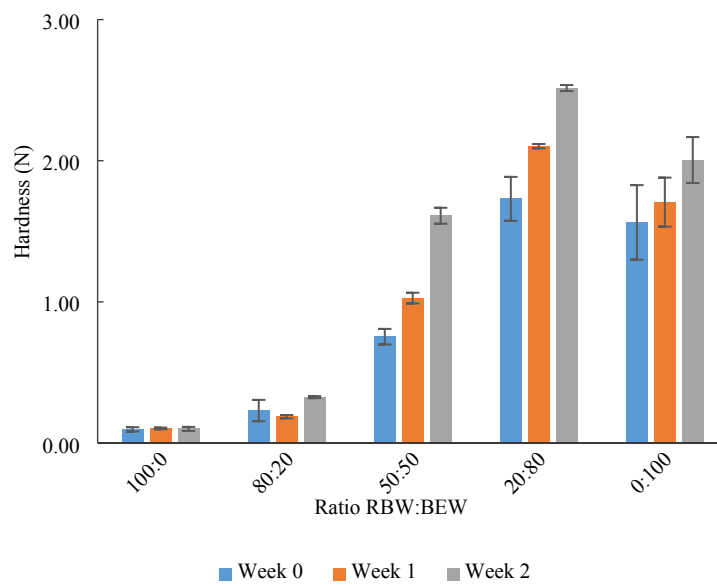


Figure S3: Evolution of hardness of 5% w/w RBW:BEW oleogel during 2 weeks

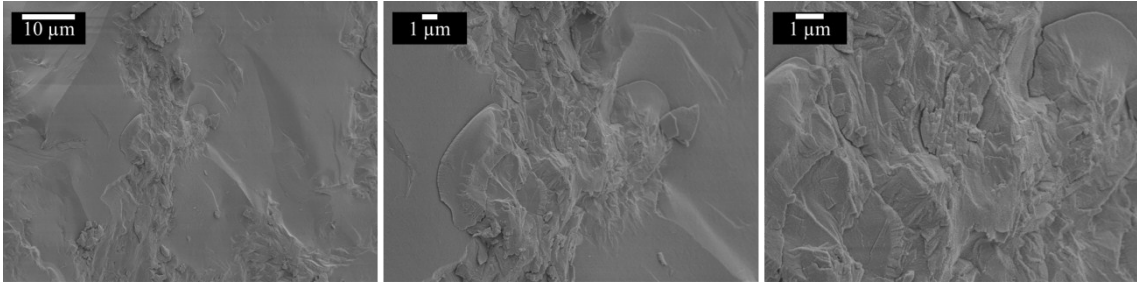


Figure S4: Cryo-SEM image of 5% RBW-oleogel at different magnifications