

## Supporting Data

Table S1. Mean Particle diameter ( $d_{4,3}$ ) of the different solutions and blends at different pHs

Protein	Significance between batches <sup>1</sup>	Mean particle diameter $d_{4,3}$ ( $\mu\text{m}$ )		
		pH 4.5	pH 5.3	pH 7
Pork sws	A	61.6 ± 4.3	43.2 ± 2.5	21.3 ± 9.8
Pork ws	A	61.2 ± 2.8	40.6 ± 13.6	44.3 ± 17.7
Potato	B	13.3 ± 0.5	17.0 ± 0.8	19.6 ± 1.8
Potato + sws	A	38.1 ± 8.8	45.4 ± 6.4	23.9 ± 3.8
Potato + ws	A	50.1 ± 2.8	24.4 ± 0.7	22.2 ± 0.1
Canola	C	12.4 ± 4.4	10.5 ± 3.8 <sup>2</sup>	29.6 ± 11.9 <sup>2</sup>
Canola + sws	A	34.8 ± 2.6	24.3 ± 1.0	28.9 ± 2.1
Canola + ws	A	51.2 ± 1.8	48.2 ± 1.0	33.9 ± 5.8
Sunflower	D	16.3 ± 10.0	17.6 ± 0.7	28.9 ± 0.5
Sunflower + sws	A	33.1 ± 2.6	33.9 ± 24.8	25.7 ± 0.6
Sunflower + ws	A	48.9 ± 1.1	26.2 ± 0.8	29.3 ± 1.1
Wheat	A	41.2 ± 14.5	24.9 ± 4.4	260.6 ± 68.6
Wheat + sws	A	62.2 ± 1.8	29.6 ± 8.7	165.2 ± 57.1
Wheat + ws	A	31.4 ± 3.7	64.0 ± 9.7	69.9 ± 1.8
Pumpkin	E	2.8 ± 2.4	6.6 ± 0.5	4.5 ± 2.4
Pumpkin + sws	A	70.0 ± 1.0	17.1 ± 1.5	66.9 ± 22.0
Pumpkin + ws	A	55.0 ± 21.2	47.0 ± 29.0	124.0 ± 87.4
	pH 4.5		p < 0.05	ns <sup>3</sup>
	pH 5.3	p < 0.05		p < 0.05
	pH 7.0	ns <sup>3</sup>	p < 0.05	
Pork or Mixtures sws	ws	ns <sup>3</sup>		

<sup>1</sup> Different letter indicates significant difference within the column (p < 0.05)

<sup>2</sup> Determination by using dynamic light scattering (z-average value · 10<sup>-3</sup>  $\mu\text{m}$ )

<sup>3</sup> ns: not significant (p > 0.05)

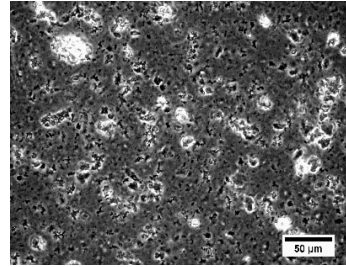
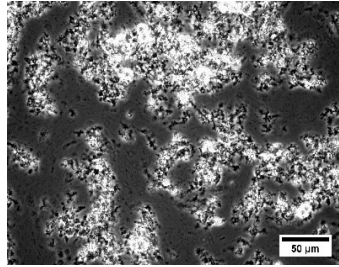
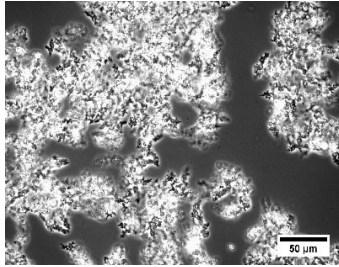
Meat proteins

4.5

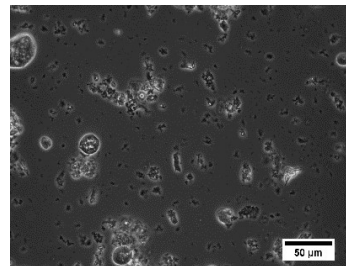
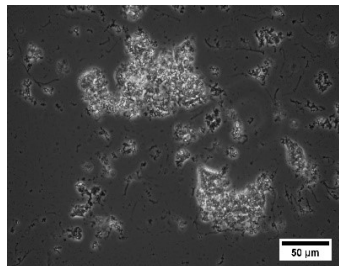
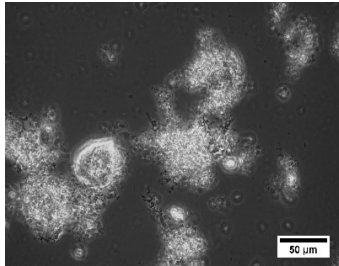
5.3

7

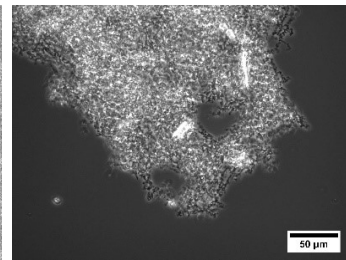
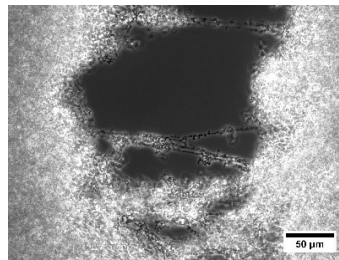
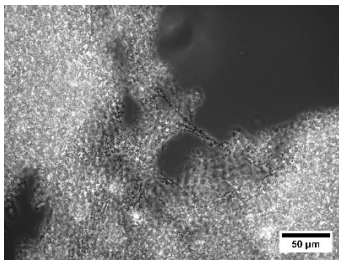
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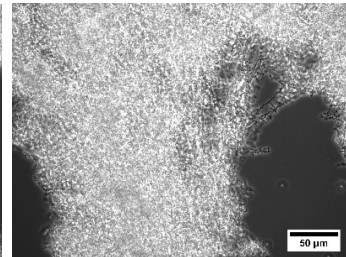
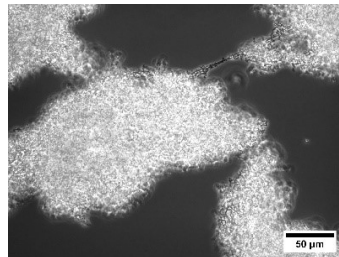
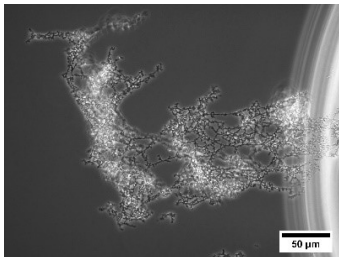
Ws

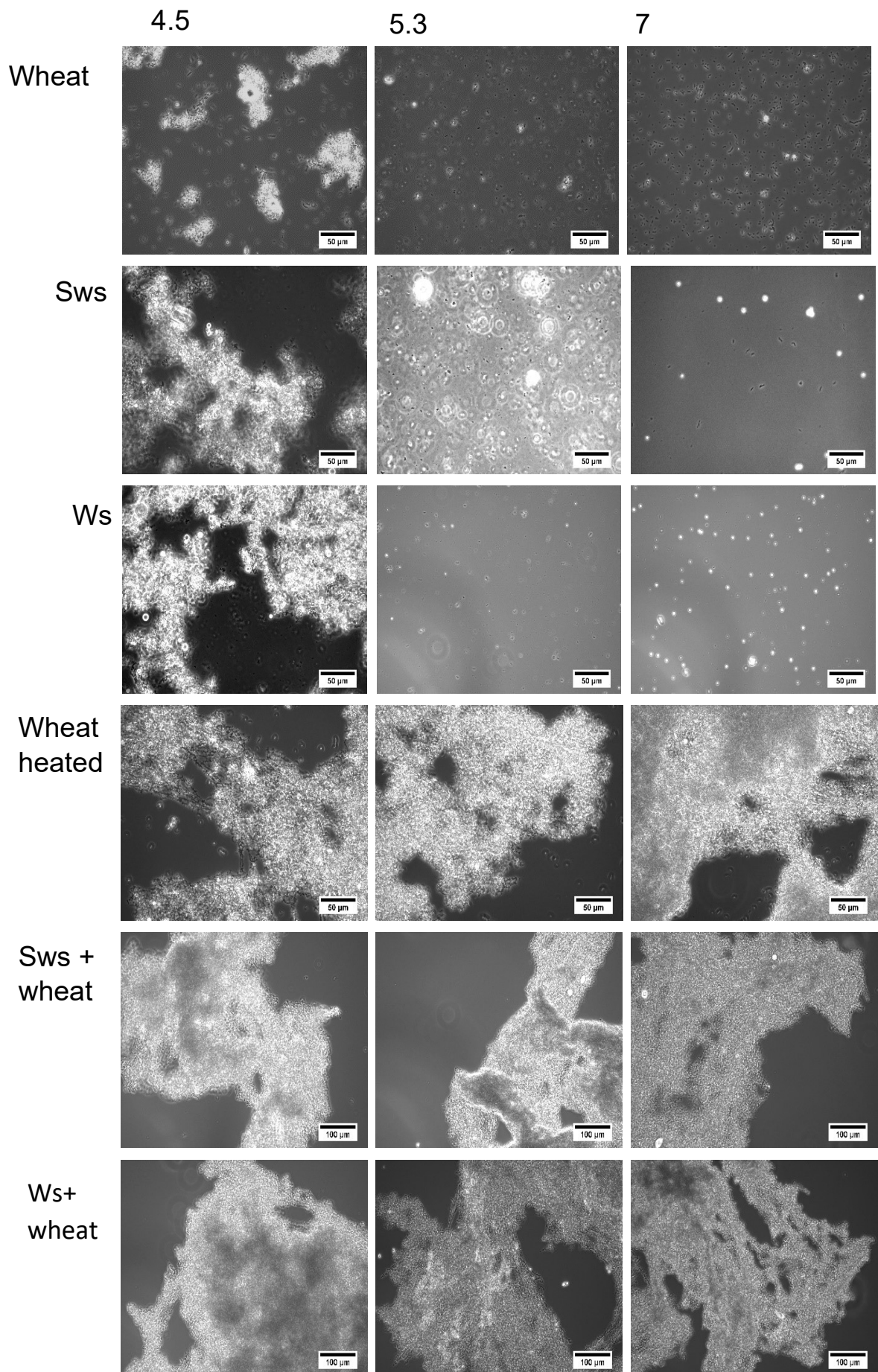


Sws heated



Ws



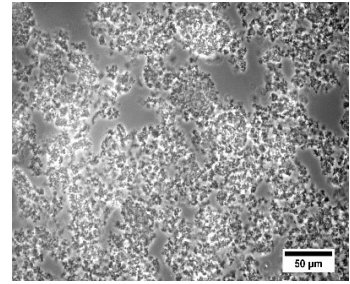
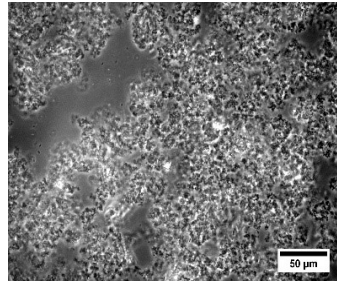
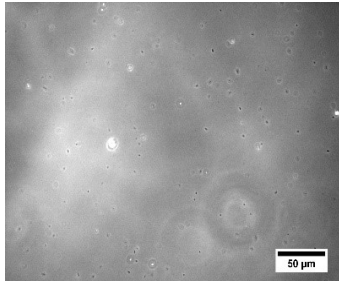


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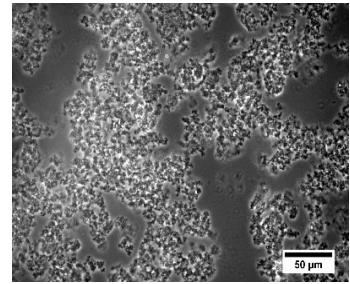
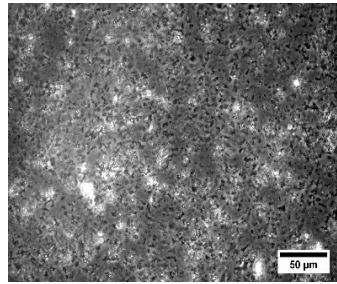
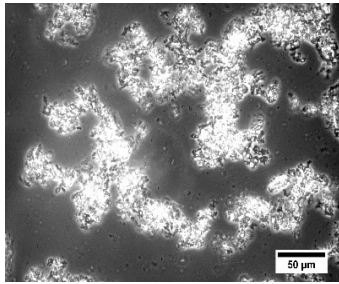
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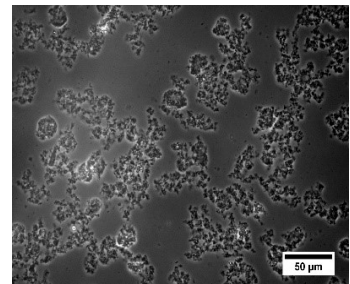
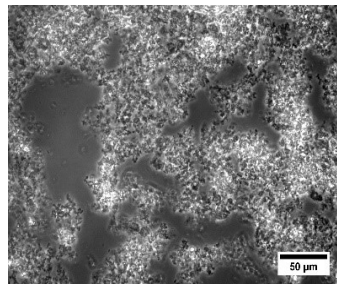
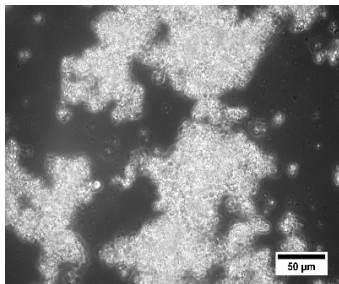
Sun-flower



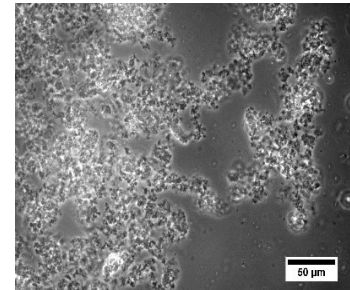
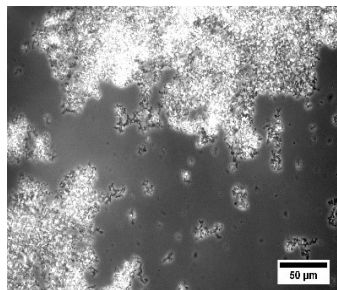
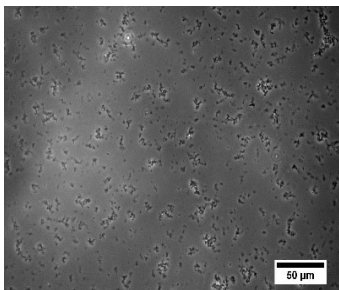
Sws



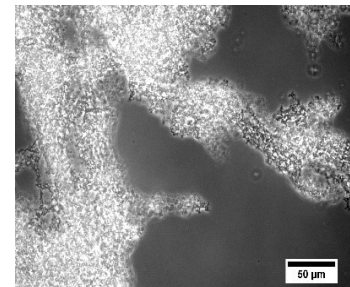
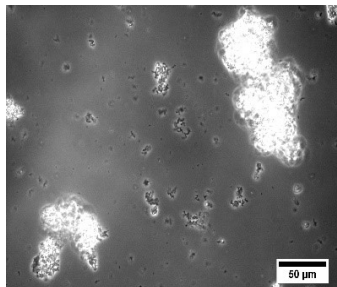
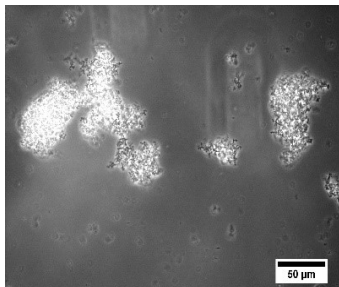
Ws



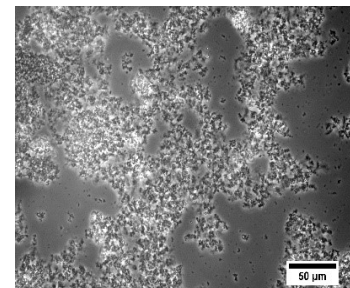
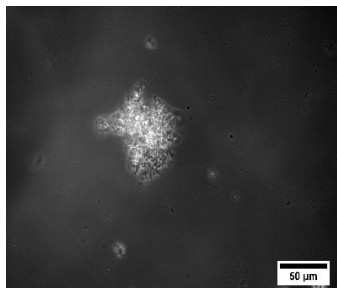
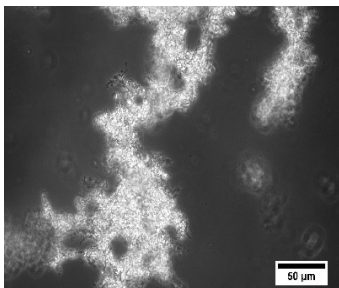
Sun-flower heated



Sws



Ws

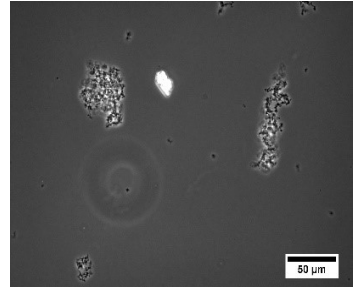
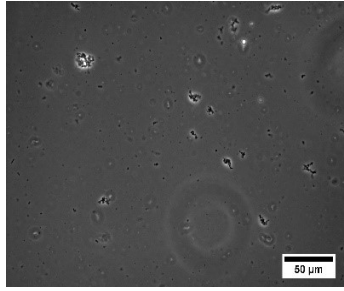
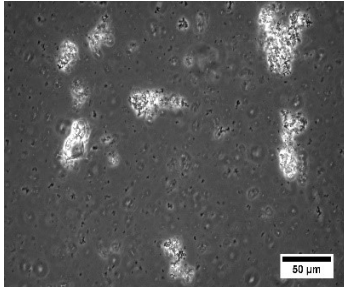


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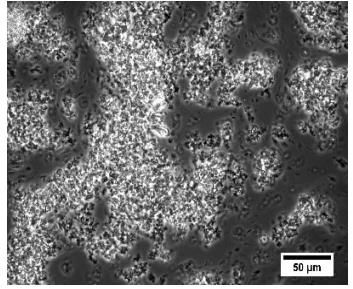
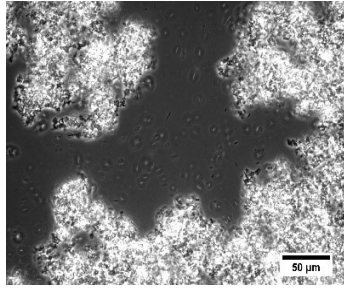
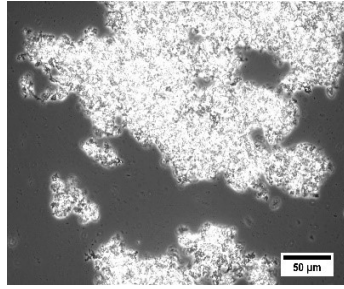
5.3

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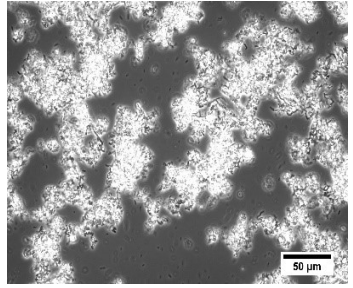
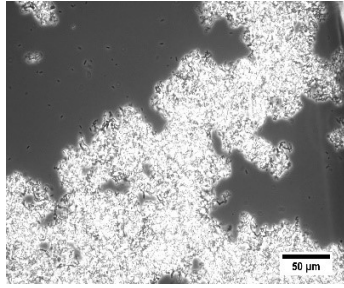
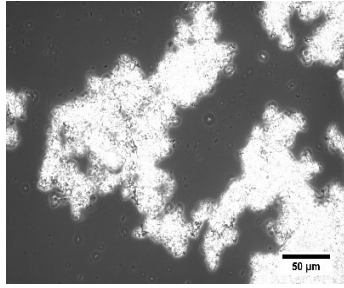
Canola



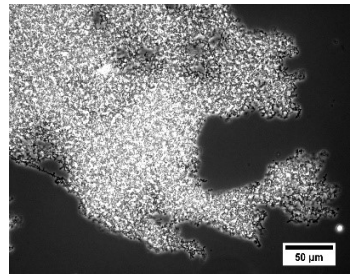
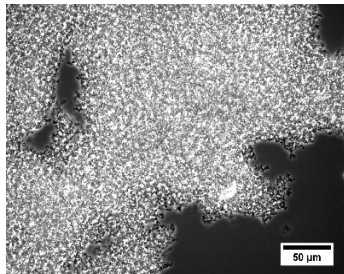
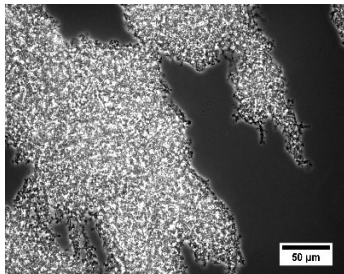
Sws



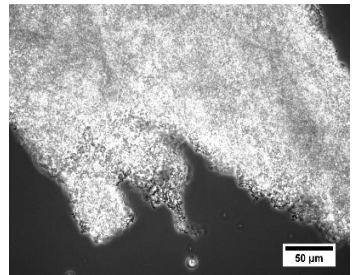
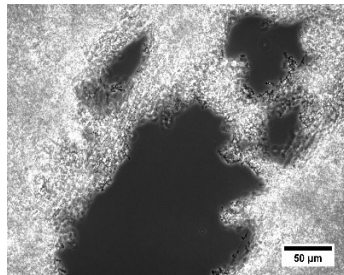
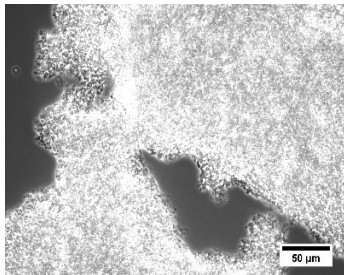
Ws



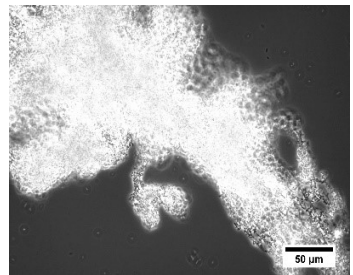
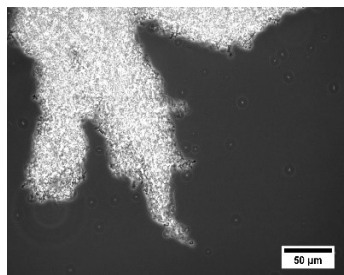
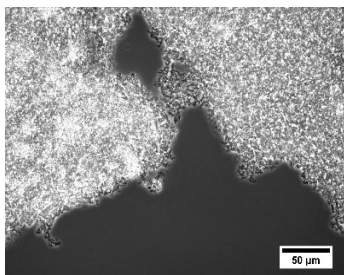
Canola heated

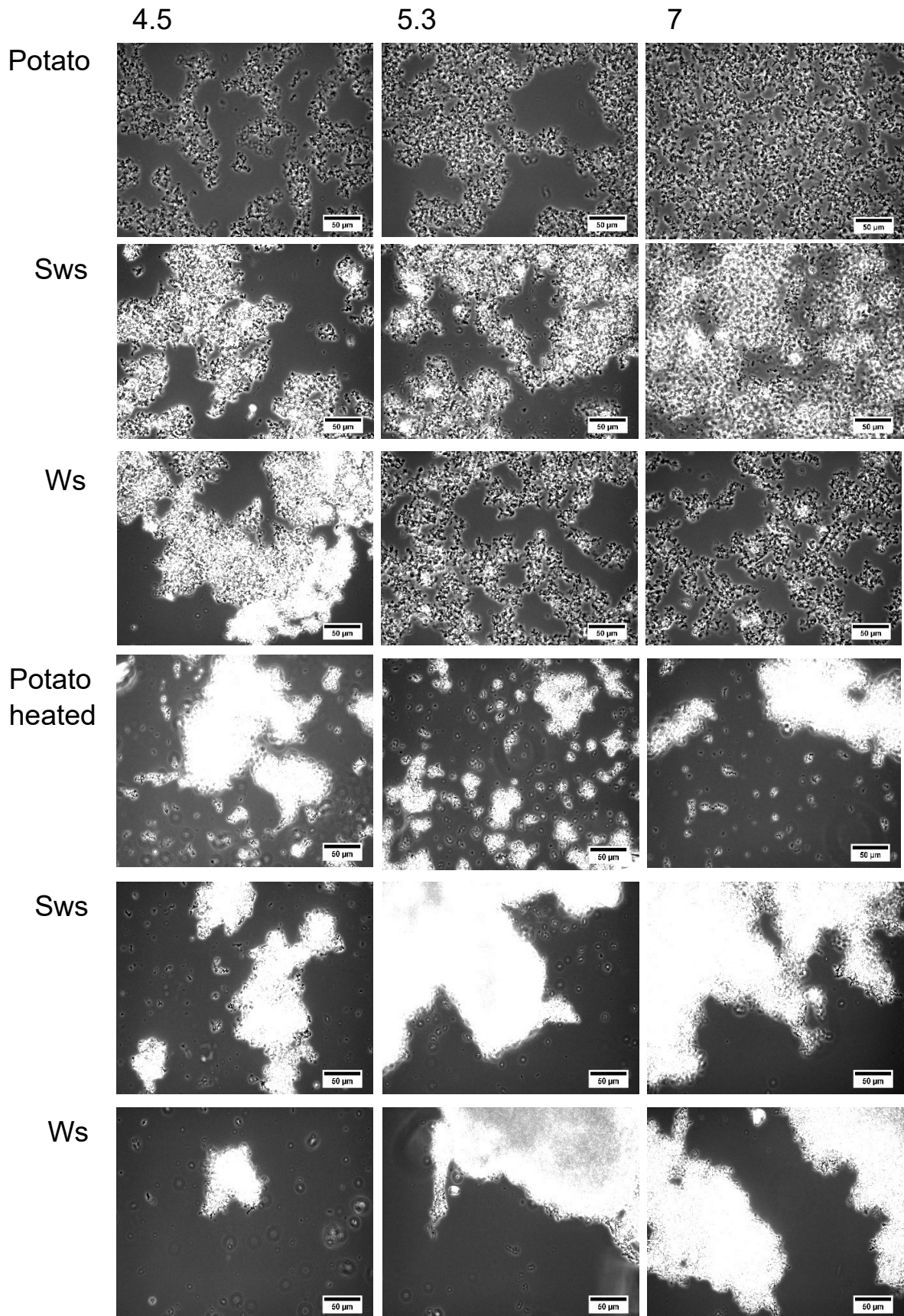


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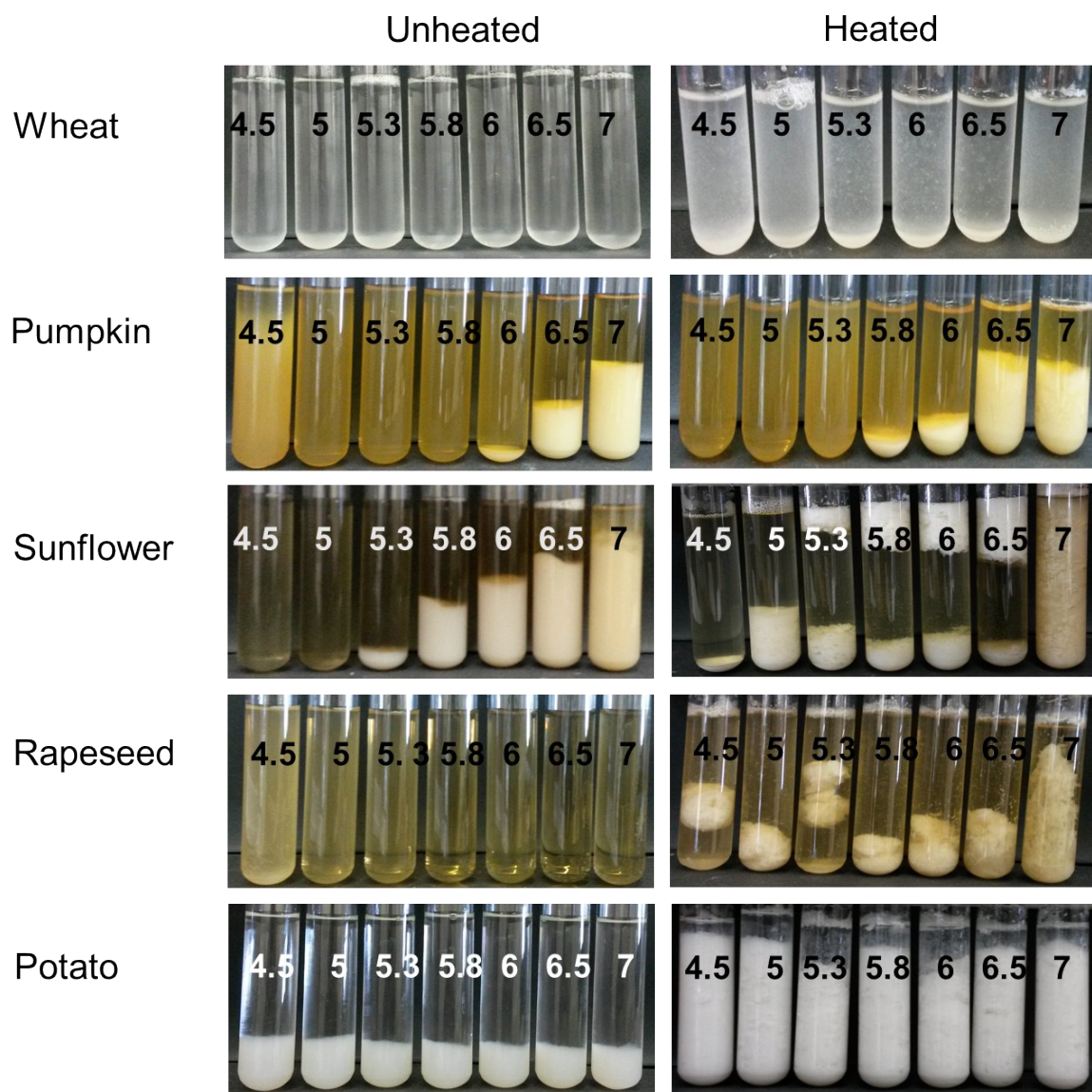


Ws





**Figure S1.** Microscopic images of meat (sws and ws), plant proteins (wheat, potato, sunflower, canola) and their protein mixtures at different pH values in unheated and heated systems.



**Figure S2.** Images of unheated and heated pure plant protein solutions (1 wt% protein) at varying pH values, all containing 1.8 wt% salt, stored overnight at 4 °C for 10 min at 95 °C. (No gel formation)