

APENDICE A.

TABLAS DE RESULTADOS EXPERIMENTALES.

Tabla A.1 Resultados experimentales de silica gel azul.

SGA-400-96.67-1.33-1.									
Silica gel azul; $P_{abs} = 400$ mm Hg, $T_{entrada} = 96.67$ °C, $T_{lecho1} = 89.66$ °C, $V = 1.33$ m/s, $D_p = 857$ μ m.									
W_{ch} [g]	W_{ch+} muestra [g]	W ch+muestra seca [g]	m_{agua} [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho1} [°C]	dC/dt.
3.554	12.2037	9.7748	2.4289	6.2208	0.390448	0	98.8	80	0.037516
3.492	11.6898	9.7815	1.9083	6.2895	0.30341	2.32	98.8	80.4	0.00396
3.5594	18.8407	15.5145	3.3262	11.9551	0.278224	8.68	83.7	83.6	0.001393
3.503	14.8407	12.3978	2.4429	8.8948	0.274644	11.25	83.1	83	-0.00101
3.4911	23.8366	19.419	4.4176	15.9279	0.27735	13.92	84.8	83.4	0.005436
3.5218	12.5281	10.6801	1.848	7.1583	0.258162	17.45	84.6	83.5	0.000524
3.5107	13.9126	11.7997	2.1129	8.289	0.254904	23.67	88.3	84.7	0.002014
3.4977	15.3194	13.0128	2.3066	9.5151	0.242415	29.87	102.3	93.8	0.006839
3.4916	9.0664	8.1177	0.9487	4.6261	0.205076	35.33	107.4	97.1	0.005169
3.4716	13.0926	11.6425	1.4501	8.1709	0.177471	40.67	108.2	98.4	0.003079
3.5108	10.0881	9.2608	0.8273	5.75	0.143878	51.58	105.6	99.1	-0.00034
3.5128	14.2831	12.9032	1.3799	9.3904	0.146948	60.5	105.2	100	0.007549
9.9467	14.2606	13.9032	0.3574	3.9565	0.090332	68	106	98.6	-0.00133

Tabla A.2 Resultados experimentales de silica gel azul.

SGA-400-99.83-1.35-2									
Silica gel azul; $P_{abs} = 400$ mm Hg, $T_{entrada} = 99.83$ °C, $T_{lecho1} = 89.8$ °C, $V = 1.35$ m/s, $D_p = 857$ μ m.									
W_{ch} [g]	W_{ch+} muestra [g]	W muestra seca [g]	m_{agua} [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho1} [°C]	dC/dt
3.4738	6.7974	6.0874	0.71	2.6136	0.271656	0	104.5	83.9	-0.00087
3.5525	13.16	11.0956	2.0644	7.5431	0.273681	2.33	102.3	82.1	0.009748
3.5265	7.611	6.7832	0.8278	3.2567	0.254184	4.33	101.6	82.4	0.002275
3.4905	6.6555	6.0214	0.6341	2.5309	0.250543	5.93	100.9	83.8	0.003299
3.595	5.1111	4.8167	0.2944	1.2217	0.240976	8.83	101	86.5	0.010154
3.4902	5.3461	5.0043	0.3418	1.5141	0.225745	10.33	101.3	86.6	-0.00606
3.5555	12.0242	10.3889	1.6353	6.8334	0.23931	12.57	101.3	89.9	-0.00021
3.5138	11.0426	9.5859	1.4567	6.0721	0.239901	15.33	100.7	90.6	0.002505
3.5237	13.7708	11.8783	1.8925	8.3546	0.226522	20.67	98.5	90.3	0.005833
3.5205	15.3352	13.3557	1.9795	9.8352	0.201267	25	99.8	93.2	0.003776
3.5206	14.5556	12.8585	1.6971	9.3379	0.181743	30.17	99.9	93.6	-0.00107
3.4967	17.3457	15.1576	2.1881	11.6609	0.187644	35.67	101.8	94.8	0.005052
3.5418	14.3939	12.8439	1.55	9.3021	0.166629	39.83	102.2	95.9	0.001456
3.5592	15.7865	14.2017	1.5848	10.6425	0.148912	52	86.7	96.6	-0.00407
3.4823	9.5634	8.8145	0.7489	5.3322	0.140449	49.92	94.9	96.8	-0.00281

Tabla A.3 Resultados experimentales de silica gel azul.

SGA-400-95.03-1.33-3.

Silica gel azul; $P_{abs} = 400$ mm Hg, $T_{entrada} = 95.03$ °C, $T_{lecho1} = 89.12$ °C, $V = 1.33$ m/s,
 $D_p = 2342$ μ m.

W_{ch} [g]	W_{ch+} muestra [g]	$W_{muestra}$ seca [g]	m_{agua} [g]	Sólido seco. [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho1} [°C]	dC/dt
3.5169	6.2111	5.5965	0.6146	2.0796	0.295538	0	93.2	83.4	0.007924
3.5179	5.8435	5.3412	0.5023	1.8233	0.275489	2.53	90.4	80.4	0.004338
3.5901	5.0105	4.7202	0.2903	1.1301	0.25688	6.82	83.1	82.5	0.009727
3.5205	5.4722	5.1027	0.3695	1.5822	0.233536	9.22	88.7	86.8	0.001794
3.469	5.7932	5.3595	0.4337	1.8905	0.22941	11.52	92.1	91.5	0.00576
3.489	4.3438	4.1917	0.1521	0.7027	0.216451	13.77	100.6	91.6	0.004657
3.495	5.8253	5.4409	0.3844	1.9459	0.197544	17.83	107.9	93.8	0.000338
3.5604	7.7635	7.0726	0.6909	3.5122	0.196714	20.28	107.8	97.3	-0.00106
3.5205	9.4913	8.4857	1.0056	4.9652	0.20253	25.75	95.9	90	0.000799
3.5423	9.6134	8.6118	1.0016	5.0695	0.197574	31.95	98.9	92.3	-0.00316
3.5372	12.5616	10.9839	1.5777	7.4467	0.211866	36.47	96.9	91.6	-0.00074
3.5564	11.1847	9.8311	1.3536	6.2747	0.215723	41.67	94.3	92.6	-0.0044
3.4683	10.2454	8.947	1.2984	5.4787	0.236991	46.5	92.2	90.3	0.002184
3.5407	11.7025	10.1855	1.517	6.6448	0.228299	50.48	88.4	83.6	-0.00452

Tabla A.4 Resultados experimentales de silica gel azul.

SGA-400-100.16-1.35-4.

Silica gel azul; $P_{abs} = 400$ mm Hg, $T_{entrada} = 100.16$ °C, $T_{lecho1} = 83.39$ °C, $V = 1.35$ m/s,
 $D_p = 2342$ μ m.

W_{ch} [g]	W_{ch+} muestra [g]	$W_{muestra}$ seca [g]	m_{agua} [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho} [°C]	dC/dt
3.5105	12.3364	10.3927	1.9437	6.8822	0.282424	0	91.7	79.3	0.001535
3.4712	16.8727	13.9464	2.9263	10.4752	0.279355	2	99.2	82.3	0.007014
3.4911	20.2209	16.7253	3.4956	13.2342	0.264134	4.17	104.5	87.4	0.004454
3.4964	12.9103	10.9975	1.9128	7.5011	0.255003	6.22	105.4	86.7	0.005165
3.504	21.2803	17.7652	3.5151	14.2612	0.24648	7.87	100	81.2	-0.03132

Tabla A.5 Resultados experimentales de silica gel azul.

SGA-400-111.57-1.36-5.

Silica gel azul; $P_{abs} = 400$ mm Hg, $T_{entrada} = 111.57$ °C, $T_{lecho1} = 96.95$.35 °C, $V = 1.36$ m/s, $D_p = 2342$ μ m.

W_{ch} [g]	W_{ch+} muestra [g]	W muestra seca [g]	m agua [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho} [°C]	dC/dt
3.5216	13.8063	11.4894	2.3169	7.9678	0.290783	0	109.8	82.8	0.002777
3.5238	7.7719	6.8332	0.9387	3.3094	0.283647	2.57	108.6	91	0.020507
3.5087	10.6085	9.1922	1.4163	5.6835	0.249195	4.25	109.2	99.9	0.002226
3.4906	13.4542	11.492	1.9622	8.0014	0.245232	6.03	110.2	94.2	0.007647
3.4934	13.2063	11.3998	1.8065	7.9064	0.228486	8.22	110.5	92.6	0.00945
3.5556	10.0125	8.8833	1.1292	5.3277	0.211949	9.97	111.7	96.7	0.004064
3.5624	16.5494	14.4758	2.0736	10.9134	0.190005	15.37	112.2	96.1	0.002791
3.5434	7.5197	6.9215	0.5982	3.3781	0.177082	20	108.2	96.4	0.011037
3.5372	10.0754	9.3696	0.7058	5.8324	0.121014	25.08	109.8	97.1	0.002797
3.4659	10.0134	9.3922	0.6212	5.9263	0.104821	30.87	103	97.7	0.001397
3.5204	10.3012	9.6922	0.609	6.1718	0.098675	35.27	110.9	97.9	0.001379
3.5562	4.7827	4.679	0.1037	1.1228	0.092358	39.85	118.6	101.8	0.003868
3.5405	9.6192	9.208	0.4112	5.6675	0.072554	44.97	119.3	105.1	-0.00112
4.0431	11.2275	10.7078	0.5197	6.6647	0.077978	49.82	120	108	-0.00157

Tabla A.6 Resultados experimentales de silica gel azul.

SGA-360-90.83-2.37-6.

Silica gel azul; $P_{abs} = 360$ mm Hg, $T_{entrada} = 90.83$ °C, $T_{lecho1} = 87.33$ °C, $V = 2.37$ m/s, $D_p = 857$ μ m.

W_{ch} [g]	W_{ch+} muestra [g]	W muestra seca [g]	m agua [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho} [°C]	dC/dt
3.5186	7.6659	6.2922	1.3737	2.7736	0.495277	0	80.2	80	0.065379
3.5084	6.4212	5.7687	0.6525	2.2603	0.288678	3.16	80.7	80.5	0.000381
3.5571	10.3645	8.8453	1.5192	5.2882	0.287281	6.83	80.8	80.6	0.001825
3.4696	6.4183	5.7788	0.6395	2.3092	0.276936	12.5	80.2	79.9	-0.00438
3.4949	6.2129	5.5923	0.6206	2.0974	0.29589	16.83	89.2	80.8	0.010072
3.4906	4.2029	4.0564	0.1465	0.5658	0.258925	20.5	98.6	82.4	0.005986
3.5096	6.4202	5.8664	0.5538	2.3568	0.23498	24.5	100.5	86.6	0.00176
3.4906	9.2467	8.1883	1.0584	4.6977	0.225302	30	98.8	94.3	0.003631
3.5034	13.9061	12.1254	1.7807	8.622	0.20653	35.17	96.4	95.7	0.001643
3.5533	12.3735	10.9228	1.4507	7.3695	0.196852	41.06	96.4	96.2	-0.00296
3.5233	14.7912	12.726	2.0652	9.2027	0.224412	50.37	94.1	95.8	-0.00242
3.4923	8.1316	7.2105	0.9211	3.7182	0.247727	60	94.1	95.8	-0.00413

Tabla A.7 Resultados experimentales de silica gel azul.

SGA-300-100.05-1.55-7.

Silica gel azul; $P_{abs} = 300$ mm Hg, $T_{entrada} = 100.05$ °C, $T_{lecho1} = 88.71$ °C, $V = 1.55$ m/s, $D_p = 857$ μ m.

W_{ch} [g]	W_{ch+} muestra [g]	W muestra seca [g]	m agua [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho} [°C]	dC/dt
3.5298	5.9373	5.3937	0.5436	1.8639	0.291647	0	100	76.7	0.01132
3.521	17.0718	14.2356	2.8362	10.7146	0.264704	2.38	99	76.8	0.006153
3.5338	14.5957	12.3629	2.2328	8.8291	0.252891	4.3	99	78.1	0.003568
3.4846	10.0562	8.7601	1.2961	5.2755	0.245683	6.32	102.3	82.3	0.005263
3.524	13.6563	11.7248	1.9315	8.2008	0.235526	8.25	101.2	84.9	0.001158
3.4985	12.2725	10.6116	1.6609	7.1131	0.233499	10	100.3	90.4	0.005488
3.5554	10.4738	9.2344	1.2394	5.679	0.218243	12.78	100.1	88.1	0.001622
3.4986	15.8243	13.6462	2.1781	10.1476	0.214642	15	100.1	92.8	0.005608
3.5187	18.0647	15.7871	2.2776	12.2684	0.185648	20.17	98.8	86.6	0.003788
3.5478	10.0866	9.1492	0.9374	5.6014	0.167351	25	100.2	91.3	0.002899
3.5805	11.9807	10.8706	1.1101	7.2901	0.152275	30.2	99.5	95.8	0.003165
3.4963	9.9398	9.1619	0.7779	5.6656	0.137302	34.93	99.4	92.3	0.003236
3.4613	10.3128	9.6045	0.7083	6.1432	0.115298	41.73	99.6	92.8	0.001441
3.5527	8.3098	7.8641	0.4457	4.3114	0.103377	50	100.8	93.3	0.002132
3.4687	13.0792	12.3621	0.7171	8.8934	0.080633	60.67	100.4	94.6	0.000548
3.5422	15.0262	14.2198	0.8064	10.6776	0.075523	70	100.1	95.9	0.000251
3.5684	19.7234	18.6242	1.0992	15.0558	0.073008	80	100.1	95.3	-0.00091

Tabla A.8 Resultados experimentales de silica gel azul.

SGA-300-100.18-1.55-8.

Silica gel azul; $P_{abs} = 300$ mm Hg, $T_{entrada} = 100.18$ °C, $T_{lecho1} = 91.33$ °C, $V = 1.55$ m/s, $D_p = 857$ μ m.

W_{ch} [g]	W_{ch+} muestra [g]	W muestra seca [g]	m agua [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho} [°C]	dC/dt
3.5551	3.952	3.8518	0.1002	0.2967	0.337715	0	89.4	80.8	0.023079
3.4932	9.1391	7.9304	1.2087	4.4372	0.272402	2.83	88.5	87.7	0.015411
3.5091	9.196	8.0838	1.1122	4.5747	0.24312	4.73	102	91.1	0.005676
3.4915	7.307	6.6004	0.7066	3.1089	0.227283	7.52	105	92.1	0.010416
3.5974	7.4401	6.798	0.6421	3.2006	0.200619	10.08	107.7	93.8	0.018733
3.5353	5.799	5.4843	0.3147	1.949	0.161467	12.17	105.8	95.4	-0.0033
3.5555	6.023	5.6676	0.3554	2.1121	0.168269	14.23	103.8	96.1	-0.00461
3.4777	5.5702	5.2289	0.3413	1.7512	0.194895	20	100.6	93.4	0.002983
3.5311	5.4148	5.1272	0.2876	1.5961	0.180189	24.93	98.8	91.6	-0.00723

Tabla A.9 Resultados experimentales de silica gel azul.

SGA-240-78.77-1.75-9.

Silica gel azul; $P_{abs} = 240$ mm Hg, $T_{entrada} = 78.77$ °C, $T_{lecho1} = 73.83$ °C, $V = 1.75$ m/s, $D_p = 857$ μ m.

W_{ch} [g]	W_{ch+} muestra [g]	W muestra seca [g]	m agua [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho} [°C]	dC/dt
3.4856	5.9836	5.4117	0.5719	1.9261	0.296921	0	71.2	70.8	0.009258
3.5216	10.2765	8.8158	1.4607	5.2942	0.275906	2.27	78.7	70.8	0.007077
3.5552	14.5957	12.3019	2.2938	8.7467	0.262247	4.2	72.7	71.2	0.006625
3.4754	9.588	8.372	1.216	4.8966	0.248336	6.3	74.8	71.6	0.002563
3.489	8.5702	7.5808	0.9894	4.0918	0.241801	8.85	76.9	74.6	0.005198
3.5009	11.8358	10.2638	1.572	6.7629	0.232445	10.65	74.2	72.4	0.004202
3.5192	8.0821	7.2486	0.8335	3.7294	0.223494	12.78	78.6	78	0.003494
3.4893	6.9856	6.3679	0.6177	2.8786	0.214583	15.33	74.6	74.2	-0.00016
3.4955	6.6627	6.1015	0.5612	2.606	0.215349	20.18	72.8	70.6	0.003071
3.555	9.108	8.1824	0.9256	4.6274	0.200026	25.17	80.4	71.4	0.003405
3.5285	6.7165	6.2242	0.4923	2.6957	0.182624	30.28	81.2	71.2	0.001466
3.5958	9.705	8.792	0.913	5.1962	0.175705	35	99.4	92.3	0.000287
3.5122	10.0035	9.0406	0.9629	5.5284	0.174173	40.33	83.1	72.9	0.00257
2.4914	10.6057	9.5597	1.046	7.0683	0.147985	50.52	81.8	73	0.000921
3.5197	6.5086	6.1441	0.3645	2.6244	0.138889	60.4	81.2	72.5	-0.0023

Tabla A.10 Resultados experimentales de semilla de cilantro

SDC-300-89.38-2.31-1.

Semilla de cilantro; $P_{abs} = 300$ mm Hg, $T_{linea} = 90$ °C, $T_{entrada} = 89.38$ °C, $T_{lecho1} = 79.66$ °C, $V = 2.31$ m/s, $D_p = 3480$ μ m, $\phi = 0.87$, $\rho = 620.73$ kg/m³, $m = 300$ g.

W_{ch} [g]	W_{ch+} muestra [g]	W muestra seca [g]	m agua [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho1} [°C]	dC/dt
3.5312	7.2032	5.1875	2.0157	1.6563	1.21699	0	88.1	76.4	0.012232
3.5554	9.9032	6.4587	3.4445	2.9033	1.186409	2.5	80.3	78.8	0.018065
3.5108	5.7043	4.5309	1.1734	1.0201	1.150279	4.5	86.4	76.3	0.026602
3.5064	6.9929	5.1679	1.825	1.6615	1.098405	6.45	89.4	76.5	0.00209
3.5264	8.5716	5.9349	2.6367	2.4085	1.094748	8.2	90.2	76.8	0.02799
3.4972	10.8323	7.0886	3.7437	3.5914	1.042407	10.07	90.1	76.5	0.012675
3.5001	12.0151	7.7309	4.2842	4.2308	1.012622	12.42	90.4	76.7	0.032735
3.5003	12.5622	8.2225	4.3397	4.7222	0.919	15.28	92.4	77.1	0.034336
3.4767	7.4542	5.7517	1.7025	2.275	0.748352	20.25	92.4	78.1	0.041836
3.4866	5.7621	4.9662	0.7959	1.4796	0.537916	25.28	90.6	81.2	0.0469
3.535	6.1433	5.5197	0.6236	1.9847	0.314204	30.05	93.8	78.2	0.015602
3.4682	6.4621	5.9039	0.5582	2.4357	0.229174	35.5	93.4	80.5	0.022598
3.5497	6.9671	6.5807	0.3864	3.031	0.127483	40	89.6	83.5	0.00559
3.5378	6.2447	6.0623	0.1824	2.5245	0.072252	49.88	85.8	87.2	0.001044
3.4911	6.7328	6.5444	0.1884	3.0533	0.061704	59.98	87.8	91.1	-0.00103

Tabla A.11 Resultados experimentales de semilla de cilantro

SDC-300-101.46-2.35-2.

Semilla de cilantro; $P_{abs} = 300$ mm Hg, $T_{linea} = 100$ °C, $T_{entrada} = 101.46$ °C, $T_{lecho1} = 83.21$ °C, $V = 2.35$ m/s, $D_p = 3480$ μ m, $\phi = 0.87$, $\rho = 620.73$ kg/m³, $m = 300$ g.

W_{ch} [g]	W_{ch+} muestra [g]	$W_{muestra}$ seca [g]	m_{agua} [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho1} [°C]	dC/dt
3.5375	7.3938	5.1772	2.2166	1.6397	1.351833	0	98.8	76.5	-0.02073
3.5343	10.1213	6.2861	3.8352	2.7518	1.393706	2.02	100	76.9	0.044993
3.572	10.7607	6.7084	4.0523	3.1364	1.292023	4.28	101.3	77	0.027473
3.5098	8.119	5.5727	2.5463	2.0629	1.23433	6.38	101.1	77.4	0.044363
3.5866	11.3657	7.2122	4.1535	3.6256	1.145603	8.38	101	76.4	0.048942
3.5493	7.3875	5.4201	1.9674	1.8708	1.051636	10.3	101.8	76.4	0.05805
3.5561	8.0425	5.8986	2.1439	2.3425	0.915219	12.65	101.5	76.9	0.053887
3.4688	10.9565	7.6653	3.2912	4.1965	0.784273	15.08	102.2	76.5	0.047453
3.5547	7.5363	6.1245	1.4118	2.5698	0.549381	20.03	102.2	79.8	0.047404
3.5353	7.8668	6.8287	1.0381	3.2934	0.315206	24.97	103.1	79.3	0.035966
3.4768	5.5028	5.2669	0.2359	1.7901	0.13178	30.07	101.7	85.4	0.015149
3.4896	4.9861	4.9071	0.079	1.4175	0.055732	35.09	101.4	96.5	0.0024
3.4949	4.2678	4.2354	0.0324	0.7405	0.043754	40.08	101.3	97.7	0.000455
3.5968	5.0935	5.0371	0.0564	1.4403	0.039159	50.18	102.6	99.6	-0.00287
3.5296	4.1707	4.129	0.0417	0.5994	0.06957	60.77	101.9	95.8	-0.00114

Tabla A.12 Resultados experimentales de semilla de cilantro

SDC-300-109.97-2.37-3.

Semilla de cilantro; $P_{abs} = 300$ mm Hg, $T_{linea} = 110$ °C, $T_{entrada} = 109.97$ °C, $T_{lecho1} = 87.15$ °C, $V = 2.37$ m/s, $D_p = 3480$ μ m, $\phi = 0.87$, $\rho = 620.73$ kg/m³, $m = 300$ g.

W_{ch} [g]	W_{ch+} muestra [g]	$W_{muestra}$ seca [g]	m_{agua} [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho1} [°C]	dC/dt
3.5023	6.3287	4.6576	1.6711	1.1553	1.446464	0	109.3	75.3	0.052454
3.5554	8.9894	5.8902	3.0992	2.3348	1.327394	2.27	108.8	75.5	0.03522
3.4896	4.7896	4.0715	0.7181	0.5819	1.234061	4.92	107.8	75.7	0.035169
3.5299	8.6994	5.8979	2.8015	2.368	1.183066	6.37	110.3	77.2	0.017214
3.5114	8.1982	5.6892	2.509	2.1778	1.15208	8.17	111.9	77.2	0.055961
3.5554	11.251	7.3192	3.9318	3.7638	1.044636	10.09	109.7	76.3	0.064622
3.5256	8.4982	6.2199	2.2783	2.6943	0.8456	13.17	106.2	75.8	0.042265
3.4967	9.0514	6.6699	2.3815	3.1732	0.750504	15.42	104	77.7	0.059233
3.542	6.1685	5.3176	0.8509	1.7756	0.479218	20	110.5	81.3	0.050671
3.5487	7.5952	6.8841	0.7111	3.3354	0.213198	25.25	110.3	90.2	0.028884
3.5228	5.4648	5.318	0.1468	1.7952	0.081774	29.8	110.1	99.9	0.020077
3.5799	6.6105	6.4939	0.1166	2.914	0.040014	31.88	112.7	105.8	0.001258
3.5312	5.1588	5.1117	0.0471	1.5805	0.029801	40	113.2	104.3	0.000771
3.4995	4.3116	4.2942	0.0174	0.7947	0.021895	50.25	112.2	105.3	-0.00025
3.4999	5.2504	5.2088	0.0416	1.7089	0.024343	60	112.6	109.7	-0.00041

Tabla A.13 Resultados experimentales de semilla de cilantro

SDC-400-85.75-2.12-4

Semilla de cilantro; $P_{abs} = 400$ mm Hg, $T_{linea} = 90$ °C, $T_{entrada} = 85.75$ °C, $T_{lecho1} = 83.47$ °C, $V = 2.12$ m/s, $D_p = 3480$ μ m, $\bullet = 0.87$, $\rho = 620.73$ kg/m³, $m = 300$ g.

W_{ch} [g]	W_{ch+} muestra [g]	$W_{muestra}$ seca [g]	m_{agua} [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho1} [°C]	dC/dt
3.5553	8.2901	5.6249	2.6652	2.0696	1.287785	0	84.1	83.5	0.053128
3.5289	8.8633	6.0043	2.859	2.4754	1.154965	2.5	84.3	83.6	0.004427
3.5209	7.8647	5.5446	2.3201	2.0237	1.146464	4.42	84.3	84.1	0.002975
3.5089	11.8785	7.4179	4.4606	3.909	1.14111	6.22	84	83.4	0.004937
3.4904	9.4189	6.2893	3.1296	2.7989	1.118154	10.87	84.3	83.9	0.002054
3.5203	7.6361	5.4669	2.1692	1.9466	1.114353	12.72	83.4	82.9	0.011148
3.4919	12.2578	7.6961	4.5617	4.2042	1.085034	15.35	82.6	82.2	0.036901
3.5805	8.1903	5.8797	2.3106	2.2992	1.004958	17.52	87.9	82.4	0.018711
3.549	7.0513	5.3555	1.6958	1.8065	0.938721	21.06	83.7	82.6	0.014685
3.521	8.7683	6.3128	2.4555	2.7918	0.87954	25.09	83.4	83.1	0.022176
3.5544	8.1707	6.1697	2.001	2.6153	0.765113	30.25	85.8	85.5	0.031414
3.4714	7.5536	5.9962	1.5574	2.5248	0.616841	34.97	95.7	83.7	0.018998
3.5233	7.2234	5.9662	1.2572	2.4429	0.514634	40.35	95.2	84.3	0.011287
3.533	7.4083	6.3016	1.1067	2.7686	0.399733	50.53	82.8	82.5	0.006518
3.5422	6.8905	6.0542	0.8363	2.512	0.332922	60.78	84.7	84.3	-0.00548

Tabla A.14 Resultados experimentales de semilla de cilantro

SDC-400-101.55-2.14-5

Semilla de cilantro; $P_{abs} = 400$ mm Hg, $T_{linea} = 100$ °C, $T_{entrada} = 101.55$ °C, $T_{lecho1} = 86.74$ °C, $V = 2.14$ m/s, $D_p = 3480$ μ m, $\bullet = 0.87$, $\rho = 620.73$ kg/m³, $m = 300$ g.

W_{ch} [g]	W_{ch+} muestra [g]	$W_{muestra}$ seca [g]	m_{agua} [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho1} [°C]	dC/dt
3.497	6.4219	4.6881	1.7338	1.1911	1.455629	0	102.6	83.5	0.045825
3.4854	9.4405	6.0045	3.436	2.5191	1.363979	2	101.8	83.3	0.024652
3.5343	12.7724	7.5254	5.247	3.9911	1.314675	4	100.8	83.3	0.031438
3.4913	11.398	7.007	4.391	3.5157	1.248969	6.09	101.1	83.4	0.066345
3.5313	10.6402	6.881	3.7592	3.3497	1.12225	8	101.5	83.5	0.02367
3.5553	11.5983	7.4427	4.1556	3.8874	1.068992	10.25	101.9	83.6	0.067475
3.5256	8.1986	5.9562	2.2424	2.4306	0.922571	12.42	100.6	82.7	0.016085
3.5108	7.1804	5.4849	1.6955	1.9741	0.858872	16.38	101.5	82.9	0.045919
3.4769	8.9513	6.7085	2.2428	3.2316	0.694022	19.97	101.4	84.6	0.036111
3.5494	6.6261	5.5994	1.0267	2.05	0.500829	25.32	102.9	85.4	0.034249
3.5053	5.522	5.0907	0.4313	1.5854	0.272045	32	100.4	85.1	0.014153
3.4996	5.3789	5.028	0.3509	1.5284	0.229586	35	99.1	85.8	0.024003
3.5402	6.1602	5.9107	0.2495	2.3705	0.105252	40.18	103.1	92.2	0.005655
3.4682	4.6443	4.5912	0.0531	1.123	0.047284	50.43	104.2	101.9	-0.00025
3.5005	4.8744	4.8094	0.065	1.3089	0.04966	60	100.4	99.9	-0.00083

Tabla A.15 Resultados experimentales de semilla de cilantro

SDC-400-110.55-2.17-6									
Semilla de cilantro; $P_{abs} = 400$ mm Hg, $T_{linea} = 110$ °C, $T_{entrada} = 110.55$ °C, $T_{lecho1} = 90.76$ °C, $V = 2.17$ m/s, $D_p = 3480$ μ m, $\bullet = 0.87$, $\rho = 620.73$ kg/m ³ , $m = 300$ g.									
W_{ch} [g]	W_{ch+} muestra [g]	W muestra seca [g]	m_{agua} [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho1} [°C]	dC/dt
3.5187	6.407	4.7902	1.6168	1.2715	1.271569	0	109.7	83.9	0.001551
3.4705	7.8261	5.3908	2.4353	1.9203	1.268187	2.18	108.6	82.4	0.030903
3.5212	9.0108	6.003	3.0078	2.4818	1.211943	4	109.6	82.3	0.016436
3.5328	6.2308	4.773	1.4578	1.2402	1.175456	6.22	110.5	82.4	0.073717
3.5536	11.4229	7.4031	4.0198	3.8495	1.04424	8	110.3	82.6	0.054053
3.4912	9.9634	6.8718	3.0916	3.3806	0.914512	10.4	110.4	82.8	0.062707
3.5092	6.9107	5.4286	1.4821	1.9194	0.772168	12.67	110.9	82.6	0.020502
3.529	8.5201	6.4234	2.0967	2.8944	0.724399	15	110.5	83.9	0.034495
3.4898	10.2263	7.847	2.3793	4.3572	0.546062	20.17	111.8	84.8	0.056354
3.5415	8.1082	7.1264	0.9818	3.5849	0.273871	25	112.1	88	0.037268
3.5228	6.609	6.3881	0.2209	2.8653	0.077095	30.28	110.9	96.5	0.007909
3.5198	7.5054	7.3735	0.1319	3.8537	0.034227	35.7	110.4	105.8	0.00097
3.5471	6.5582	6.4726	0.0856	2.9255	0.02926	40.82	109.9	105.7	0.000677
3.5559	8.2588	8.1524	0.1064	4.5965	0.023148	49.85	112.9	110.1	4.25E-05
3.5802	4.8993	4.87	0.0293	1.2898	0.022717	60	109.7	107.6	-0.00038

Tabla A.16 Resultados experimentales de semilla de cilantro

SDC-500-98.33-1.81-7										
Semilla de cilantro; $P_{abs} = 500$ mm Hg, $T_{linea} = 100$ °C, $T_{entrada} = 98.33$ °C, $T_{lecho1} = 89.64$ °C, $T_{lecho2} = 88.41$ °C, $V = 1.81$ m/s, $D_p = 3480$ μ m, $\bullet = 0.87$, $\rho = 620.73$ kg/m ³ , $m = 300$ g.										
W_{ch} [g]	W_{ch+} muestra [g]	W muestra seca [g]	m_{agua} [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho1} [°C]	T_{lecho2} [°C]	dC/dt
3.5217	10.0065	6.2444	3.7621	2.7227	1.381753	0	89.9	88.4	87.9	0.000298
3.5077	10.4441	6.4208	4.0233	2.9131	1.381106	2.17	93.7	87.8	87.2	0.003405
3.5418	9.1813	5.9172	3.2641	2.3754	1.374126	4.22	99.1	87.9	83.3	0.001628
3.4899	12.5608	7.3163	5.2445	3.8264	1.370609	6.38	96.5	88.6	88.3	0.007432
3.5285	11.2731	6.8121	4.461	3.2836	1.35857	8	100.3	88.1	87.4	0.024257
3.5324	10.3302	6.4751	3.8551	2.9427	1.310055	10	100.7	88.2	87.5	0.0041
3.521	8.5981	5.73	2.8681	2.209	1.29837	12.85	99.2	88.7	88.2	0.016569
3.5559	11.5572	7.092	4.4652	3.5361	1.262747	15	95.3	89.9	89.1	0.033254
3.5202	9.0007	6.1502	2.8505	2.63	1.08384	20.38	100.1	89.7	88.3	0.030006
3.5208	7.4751	5.5688	1.9063	2.048	0.930811	25.48	106.7	90.7	88.6	0.037266
3.5539	5.7521	4.8012	0.9509	1.2473	0.762367	30	104.2	90.9	88.8	0.022177
3.4907	10.4289	7.6919	2.737	4.2012	0.651481	35	94.4	91.2	90.3	0.021356
3.4712	5.6812	4.9019	0.7793	1.4307	0.544698	40	99.2	89.7	88.7	0.019006
3.5811	5.1163	4.7224	0.3939	1.1413	0.345133	50.5	100.7	90.9	90.4	0.014482
3.5491	8.338	7.5149	0.8231	3.9658	0.20755	60	95	93.9	92.1	-0.00346

Tabla A.17 Resultados experimentales de semilla de cilantro

SDC-500-110.37-1.85-8									
Semilla de cilantro; $P_{abs} = 500$ mm Hg, $T_{linea} = 110$ °C, $T_{entrada} = 110.37$ °C, $T_{lecho1} = 92.81$ °C, $V = 1.84$ m/s, $D_p = 3480$ μ m, $\phi = 0.87$, $\rho = 620.73$ kg/m ³ , $m = 300$ g.									
W_{ch} [g]	W_{ch+} muestra [g]	$W_{muestra}$ seca [g]	m_{agua} [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho1} [°C]	dC/dt
3.4668	7.8602	5.3196	2.5406	1.8528	1.371222	0	111.3	90.2	0.086296
3.5372	11.2562	7.1183	4.1379	3.5811	1.155483	2.5	111.4	87.4	0.028759
3.4765	6.6417	4.9852	1.6565	1.5087	1.097965	4.5	111.6	87	0.014825
3.5004	7.3077	5.3346	1.9731	1.8342	1.075728	6	111.1	88.6	0.003773
3.4995	7.7305	5.5475	2.183	2.048	1.065918	8.6	108.9	89.2	0.047998
3.5114	7.09	5.3459	1.7441	1.8345	0.950722	11	109.3	87.7	0.060533
3.4858	6.7865	5.2898	1.4967	1.804	0.829656	13	110.4	88.1	0.078913
3.5493	4.0175	3.8425	0.175	0.2932	0.596862	15.95	111.7	87.7	0.01898
3.5046	5.3095	4.6992	0.6103	1.1946	0.510882	20.48	113.8	88.6	0.037019
3.5311	8.1283	6.9765	1.1518	3.4454	0.334301	25.25	112.4	90	0.028839
3.4933	5.3421	5.0822	0.2599	1.5889	0.163572	31.17	105.9	88.7	0.015572
3.555	5.8684	5.6604	0.208	2.1054	0.098794	35.33	106.3	94.4	0.01093
3.5346	4.8105	4.7572	0.0533	1.2226	0.043596	40.38	108.8	106.7	0.002173
3.497	7.4629	7.3763	0.0866	3.8793	0.022324	50.17	112.1	109.6	-0.00113
3.5265	5.3551	5.2947	0.0604	1.7682	0.034159	60.6	110.6	108.2	-0.00056

Tabla A.18 Resultados experimentales de semilla de cilantro

SDC-500-123.85-1.87-9										
Semilla de cilantro; $P_{abs} = 500$ mm Hg, $T_{linea} = 120$ °C, $T_{entrada} = 123.85$ °C, $T_{lecho1} = 105.59$ °C, $T_{lecho2} = 103.1$ °C, $V = 1.87$ m/s, $D_p = 3480$ μ m, $\phi = 0.87$, $\rho = 620.73$ kg/m ³ , $m = 300$ g.										
W_{ch} [g]	W_{ch+} muestra [g]	W muestra seca [g]	m_{agua} [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho1} [°C]	T_{lecho2} [°C]	dC/dt
3.4664	8.2724	5.587	2.6854	2.1206	1.26634	0	123.3	89.1	88.4	0.049761
3.5092	8.4833	5.8191	2.6642	2.3099	1.153383	2.27	123.8	88.8	87.9	0.063788
3.5791	11.2184	7.3183	3.9001	3.7392	1.043031	4	123.8	88.9	88.2	0.077388
3.5543	6.9485	5.3727	1.5758	1.8184	0.866586	6.28	124	93.3	88.5	0.078131
3.5544	8.4799	6.4797	2.0002	2.9253	0.683759	8.62	124.1	94	88.3	0.089695
3.5487	6.1504	5.2833	0.8671	1.7346	0.499885	10.67	124.1	94.9	90.7	0.083192
3.4909	8.568	7.2935	1.2745	3.8026	0.335165	12.65	124.7	97.4	92.2	0.070574
3.553	5.0107	4.8797	0.131	1.3267	0.098741	16	124.4	103.9	99.9	0.007329
3.5713	6.0753	5.9187	0.1566	2.3474	0.066712	20.37	122.6	103.1	101.3	0.009302
3.5989	6.9241	6.8473	0.0768	3.2484	0.023642	25	120.7	116.6	115.2	0.000964
3.5806	6.9636	6.9029	0.0607	3.3223	0.01827	30.57	123.4	120.5	119.1	0.000548
3.5492	5.6509	5.6186	0.0323	2.0694	0.015608	35.43	124.5	121.8	120.7	0.000631
3.4755	4.9344	4.9165	0.0179	1.441	0.012422	40.48	125.1	122.2	120.8	0.000208
3.4975	7.1491	7.112	0.0371	3.6145	0.010264	50.85	125.1	123.1	122.1	0.00067
3.5455	6.6858	6.6728	0.013	3.1273	0.004157	59.97	124.1	126.3	123.2	-6.9E-05

Tabla A.19 Resultados experimentales de pimienta chica.

PCH- 300-89.23-2.31-1

Semilla de cilantro; $P_{abs} = 300$ mm Hg, $T_{linea} = 90$ °C, $T_{entrada} = 89.23$ °C, $T_{lecho1} = 82$ °C, $T_{lecho2} = 78.59$ °C $V = 2.31$ m/s, $D_p = 4500$ μ m, $\phi = 0.95$, $\rho = 838.87$ kg/m³.

W_{ch} [g]	W_{ch+} muestra [g]	W muestra seca [g]	m_{agua} [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho1} [°C]	T_{lecho2} [°C]	dC/dt
3.5785	9.1124	7.1285	1.9839	3.55	0.558845	0	87.2	78.1	77.1	-0.00065
3.4673	10.5699	8.0198	2.5501	4.5525	0.560154	2	91.5	77.1	75.5	-0.00886
3.5469	8.5809	6.7319	1.849	3.185	0.580534	4.3	89.5	78.7	75.7	0.010459
3.6002	10.3657	7.9358	2.4299	4.3356	0.560453	6.22	87.9	79.2	76.6	0.005342
3.5365	9.5593	7.4245	2.1348	3.888	0.549074	8.35	86.4	78.5	74.7	0.012111
3.5712	9.5965	7.5248	2.0717	3.9536	0.524003	10.42	85.8	77.7	75.4	0.00871
3.4979	6.9451	5.7897	1.1554	2.2918	0.504145	12.7	92.4	79.3	74.3	0.01228
3.5449	8.6161	6.9809	1.6352	3.436	0.475902	15	94.6	82.1	75	0.01111
3.5751	5.2264	4.7377	0.4887	1.1626	0.420351	20	94.4	84.1	76.3	0.011572
3.5542	4.8736	4.5248	0.3488	0.9706	0.359365	25.27	89.6	83.3	78	0.005865
3.4765	9.3538	7.9032	1.4506	4.4267	0.327693	30.67	76.6	79.1	77.6	0.012789
3.5542	4.6169	4.3913	0.2256	0.8371	0.269502	35.22	86.4	81.9	78.7	0.015368
3.5817	6.5437	6.0582	0.4855	2.4765	0.196043	40	90.8	87.8	83.4	0.003977
3.4911	5.8462	5.5279	0.3183	2.0368	0.156275	50	91.1	90.3	89.2	0.003172
3.549	6.6234	6.2862	0.3372	2.7372	0.123192	60.43	94.2	92.8	91.3	-0.00204

Tabla A.20 Resultados experimentales de pimienta chica.

PCH- 300-100.71-2.33-2.

Semilla de cilantro; $P_{abs} = 300$ mm Hg, $T_{linea} = 1000$ °C, $T_{entrada} = 100.71$ °C, $T_{lecho1} = 90$ °C, $T_{lecho2} = 86.73$ °C $V = 2.33$ m/s, $D_p = 4500$ μ m, $\phi = 0.95$, $\rho = 838.87$ kg/m³.

W_{ch} [g]	W_{ch+} muestra [g]	W muestra seca [g]	m_{agua} [g]	Sólido seco [g]	C [kg agua/kg sólido seco]	t [min.]	$T_{entrada}$ [°C]	T_{lecho1} [°C]	T_{lecho2} [°C]	dC/dt
3.5415	5.3659	4.6885	0.6774	1.147	0.590584	0	99.1	82.2	78.2	0.009323
3.5556	7.4039	6.0132	1.3907	2.4576	0.565877	2.65	97.8	81.1	77.8	0.008916
3.5199	9.4253	7.3296	2.0957	3.8097	0.550096	4.42	100.4	80.7	75.3	0.006408
3.4901	7.5737	6.1477	1.426	2.6576	0.536574	6.53	101.8	77.1	76.6	0.018427
3.5205	4.6197	4.2547	0.365	0.7342	0.49714	8.67	101.4	83.2	74.7	0.012068
3.5211	6.3603	5.4478	0.9125	1.9267	0.473608	10.62	101.8	85.1	75.8	0.03448
3.5324	7.3475	6.2538	1.0937	2.7214	0.401889	12.7	102.3	87.5	76.6	0.040378
3.4713	6.9461	6.1398	0.8063	2.6685	0.302155	15.17	101.8	87.7	86.6	0.0175
3.5302	6.4675	5.9642	0.5033	2.434	0.206779	20.62	100.6	94.7	93	0.001281
3.5097	5.2162	4.9304	0.2858	1.4207	0.201168	25	100.7	96.9	96	0.006824
3.4972	4.5323	4.3858	0.1465	0.8886	0.164866	30.32	101.2	98.8	97.6	0.006006
3.5227	5.3703	5.15	0.2203	1.6273	0.135378	35.23	100.7	99.1	98.6	0.003782
3.496	5.8028	5.5644	0.2384	2.0684	0.115258	40.55	98	96	95.8	0.000133
3.5001	4.4706	4.3713	0.0993	0.8712	0.113981	50.18	99	97.3	96.7	0.003818
3.5377	4.6172	4.5411	0.0761	1.0034	0.075842	60.17	104	102.6	101.7	-0.00126

Tabla A.21 Resultados experimentales de pimienta chica.

PCH- 300-109.27-2.37-3.

Semilla de cilantro; $P_{abs} = 300 \text{ mm Hg}$, $T_{linea} = 110 \text{ }^\circ\text{C}$, $T_{entrada} = 109.27 \text{ }^\circ\text{C}$, $T_{lecho1} = 96.74 \text{ }^\circ\text{C}$, $T_{lecho2} = 91.1 \text{ }^\circ\text{C}$ $V = 2.37 \text{ m/s}$, $D_p = 4500 \text{ } \mu\text{m}$, $\phi = 0.95$, $\rho = 838.87 \text{ kg/m}^3$.

$W_{ch} \text{ [g]}$	$W_{ch+} \text{ muestra [g]}$	$W_{muestra} \text{ seca [g]}$	$m_{agua} \text{ [g]}$	Sólido seco [g]	$C \text{ [kg agua/kg sólido seco]}$	$t \text{ [min.]}$	$T_{entrada} \text{ [}^\circ\text{C]}$	$T_{lecho1} \text{ [}^\circ\text{C]}$	$T_{lecho2} \text{ [}^\circ\text{C]}$	dC/dt
3.5858	5.6301	4.9032	0.7269	1.3174	0.551769	0	109.8	80.2	78.2	0.012504
3.5494	6.5754	5.5343	1.0411	1.9849	0.52451	2.18	111.3	80.4	75.9	0.032679
3.5046	6.4069	5.5392	0.8677	2.0346	0.426472	5.18	113.4	87.7	75.9	0.038999
3.5271	8.1269	7.0087	1.1182	3.4816	0.321174	7.88	113.6	90.2	77.4	0.009795
3.5313	4.0152	3.9042	0.111	0.3729	0.297667	10.28	112.4	98.2	78.7	0.013575
3.5347	7.2061	6.4396	0.7665	2.9049	0.263865	12.77	111.3	97.1	84.6	0.034597
3.4684	7.5749	6.9288	0.6461	3.4604	0.186713	15	109.2	98.9	90.4	0.011669
3.5555	8.3971	7.861	0.5361	4.3055	0.124515	20.33	109.6	105.3	99.6	0.005025
3.5969	11.3325	10.6322	0.7003	7.0353	0.099541	25.3	110.2	104.7	101.6	0.004132
3.5109	9.0737	8.6666	0.4071	5.1557	0.078961	30.28	109.3	105.5	103.9	0.001971
3.5551	8.7329	8.3982	0.3347	4.8431	0.069109	35.28	109.7	107.1	104.7	0.001307
3.4912	6.4668	6.2975	0.1693	2.8063	0.060329	42	111.9	108.5	107.3	0.000984
3.4767	8.0783	7.8566	0.2217	4.3799	0.050618	51.87	104.4	101.5	98.9	0.000582
3.4859	9.2178	8.9678	0.25	5.4819	0.045605	60.48	93.7	89	98.3	-0.00075