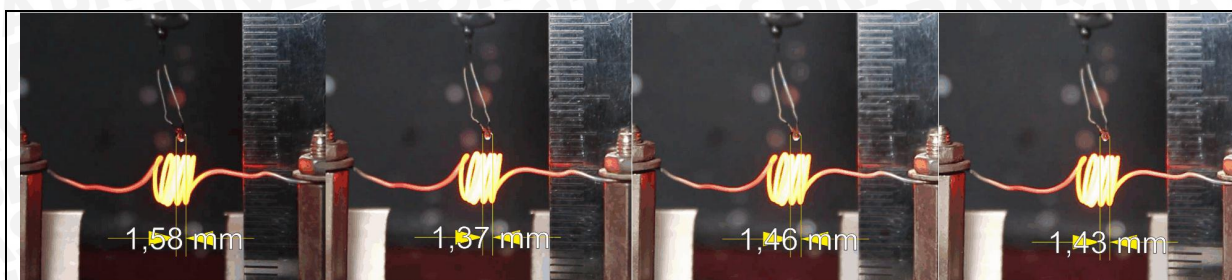


Lampiran 1. Lembar Data Hasil Pengujian

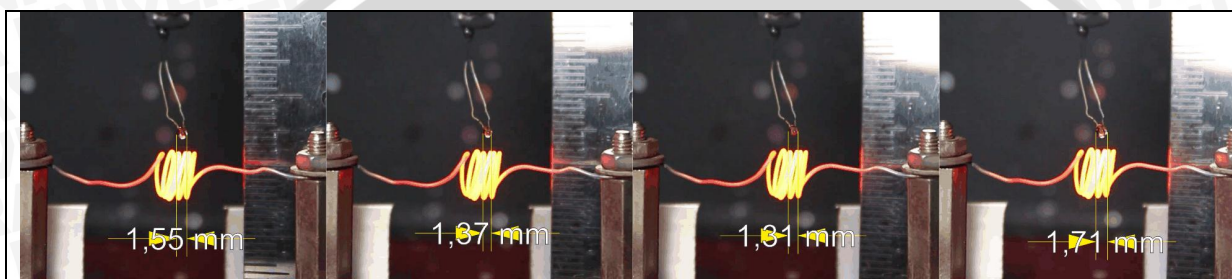
Jenis Minyak	Percobaan	Temperatur Pembakaran (°C)	Waktu Api		Burning Lifetime(s)	Visualisasi Api		Diameter Droplet		Burning Rate (mm <sup>2</sup> /s)
			Ignition Delay (s)	Mati (s)		Lebar (mm)	Tinggi (mm)	Awal (mm)	Sebelum terbakar (mm)	
0%	1	534	5,92	8,10	2,18	5,64	38,63	1,42	1,65	1,2489
	2	516	6,62	8,30	1,68	6,00	38,10	1,33	1,52	1,3752
	3	598	6,44	8,74	2,30	6,00	40,92	1,51	1,75	1,3315
	4	530	5,86	8,40	2,54	6,17	44,27	1,63	1,80	1,2756
	Deviasi	36,5895	0,3775	0,2675	0,3624	0,2232	2,8074	0,1282	0,12	0,0566
Mean	544,275	6,210	8,385	2,175	5,953	40,480	1,473	1,680	1,308	
1%	1	506	4,47	6,44	1,97	6,48	40,88	1,46	1,58	1,2672
	2	527	4,25	5,72	1,47	6,88	38,81	1,26	1,37	1,2768
	3	595	4,29	5,94	1,65	5,82	37,70	1,27	1,46	1,2919
	4	521	4,39	5,98	1,59	6,05	38,92	1,26	1,43	1,2861
	Deviasi	39,5	0,099331	0,30243456	0,21354156	0,27386127	1,32197768	0,09844626	0,08831760	0,01081954
mean	537,25	4,35	6,02	1,67	6,11	39,0775	1,3125	1,46	1,280	
2%	1	524	4,31	6,14	1,83	6,22	38,10	1,37	1,55	1,3128
	2	540	4,23	5,7	1,47	6,09	41,22	1,27	1,37	1,2768
	3	535	4,57	5,98	1,41	6,22	38,89	1,19	1,31	1,2171
	4	546	4,09	6,34	2,25	6,09	37,17	1,50	1,71	1,2996
	Deviasi	9,32291084	0,20166	0,27030846	0,38729833	0,07505553	1,732368321	0,13375973	0,18138357	0,04236219
Mean	536,250	4,300	6,040	1,740	6,155	38,845	1,333	1,485	1,277	
3%	1	458	3,3	5,2	1,9	6,99	37,89	1,35	1,53	1,2321
	2	535	4,22	5,94	1,72	5,82	35,67	1,31	1,48	1,2735
	3	532	4,6	6,48	1,88	6,67	43,18	1,32	1,53	1,2452
	4	524	3,92	5,3	1,38	6,03	37,25	1,18	1,32	1,2626
	Deviasi	36,65461	0,54906	0,59789	0,24055	0,54537	3,25811	0,07528	0,09950	0,01837
Mean	512,244	4,010	5,730	1,720	6,378	38,498	1,290	1,465	1,253	

4%	1	491	4	6,96	2,96	6,48	36,25	1,37	1,59	0,8541
	2	498	3,95	6,9	2,95	5,69	39,56	1,41	1,53	0,7935
	3	489	3,81	6,82	3,01	5,69	39,25	1,37	1,55	0,7982
	4	487	4,69	7,98	3,29	7,58	34,53	1,44	1,68	0,8579
	<b>Deviasi</b>	<b>4,78713553</b>	<b>0,393309</b>	<b>0,54635153</b>	<b>0,16049402</b>	<b>0,89453898</b>	<b>2,42538484</b>	<b>0,03403429</b>	<b>0,06652067</b>	<b>0,03480276</b>
<b>Mean</b>	<b>491,250</b>	<b>4,113</b>	<b>7,165</b>	<b>3,053</b>	<b>6,360</b>	<b>37,398</b>	<b>1,398</b>	<b>1,588</b>	<b>0,826</b>	
100%	1	426	3,763	5,448	1,685	5,837	28,841	1,35	1,352	1,0848
	2	405	3,798	6,27	2,472	7,275	22,21	1,61	1,835	1,3621
	3	439	4,449	6,319	1,87	5,923	28,391	1,46	1,392	1,0362
	4	472	4,882	6,222	1,34	5,665	25,923	1,42	1,33	1,3201
	<b>Deviasi</b>	<b>27,994</b>	<b>0,541</b>	<b>0,413</b>	<b>0,474</b>	<b>0,741</b>	<b>3,038</b>	<b>0,109</b>	<b>0,240</b>	<b>0,164</b>
<b>Mean</b>	<b>435,489</b>	<b>4,223</b>	<b>6,065</b>	<b>1,842</b>	<b>6,175</b>	<b>26,341</b>	<b>1,461</b>	<b>1,477</b>	<b>1,201</b>	

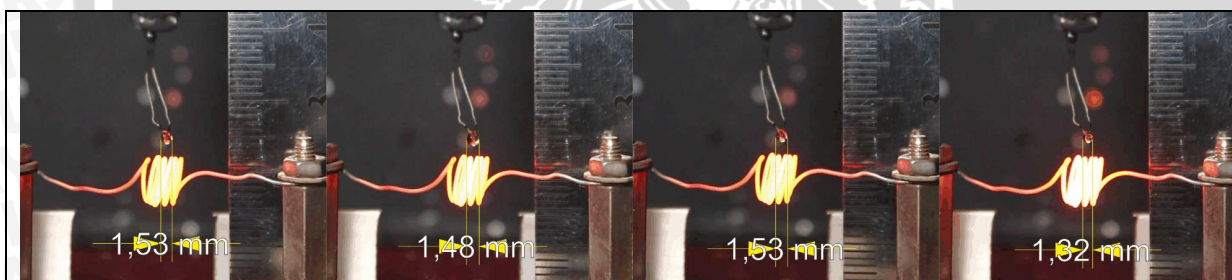
Lampiran 2. Gambar droplet dan visualisasi nyala api



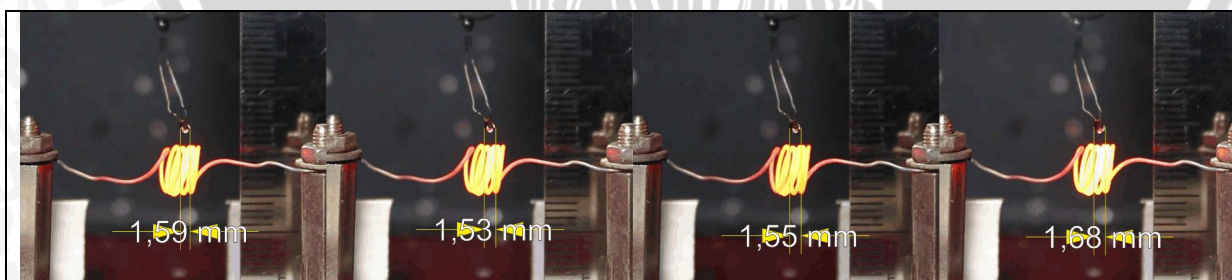
Diameter droplet bahan bakar dengan penambahan minyak cengkeh 1%



Diameter droplet bahan bakar dengan penambahan minyak cengkeh 2%

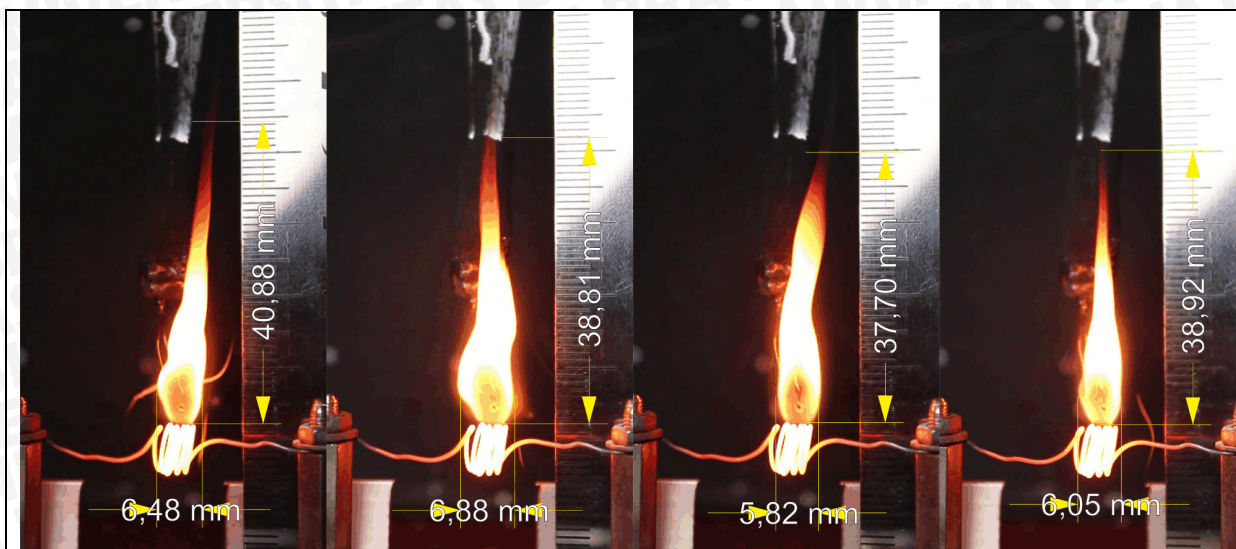


Diameter droplet bahan bakar dengan penambahan minyak cengkeh 3%

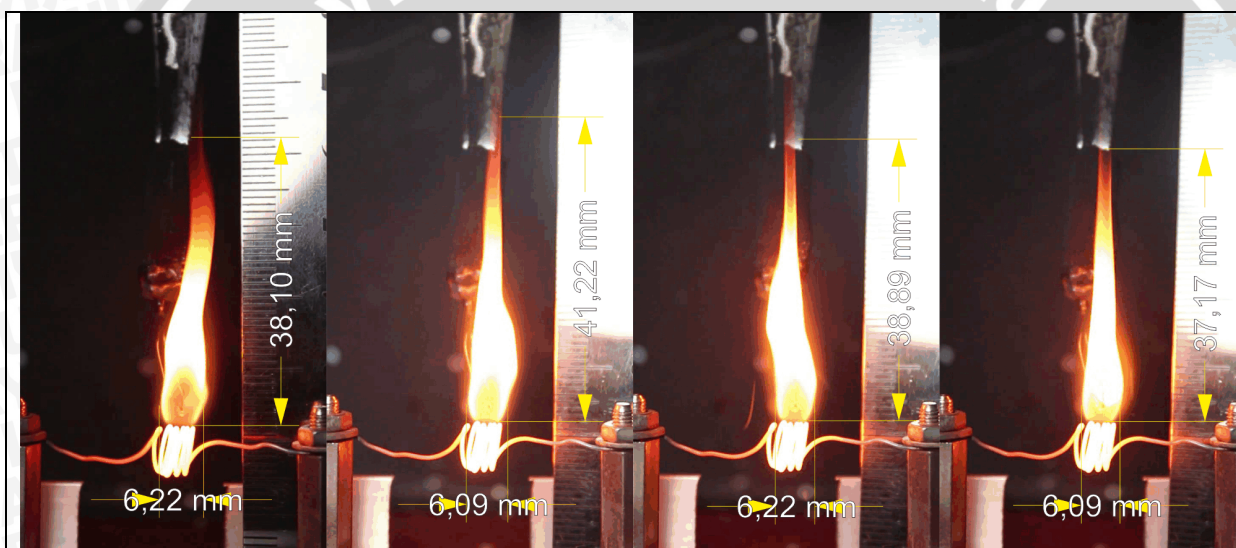


Diameter droplet bahan bakar dengan penambahan minyak cengkeh 4%



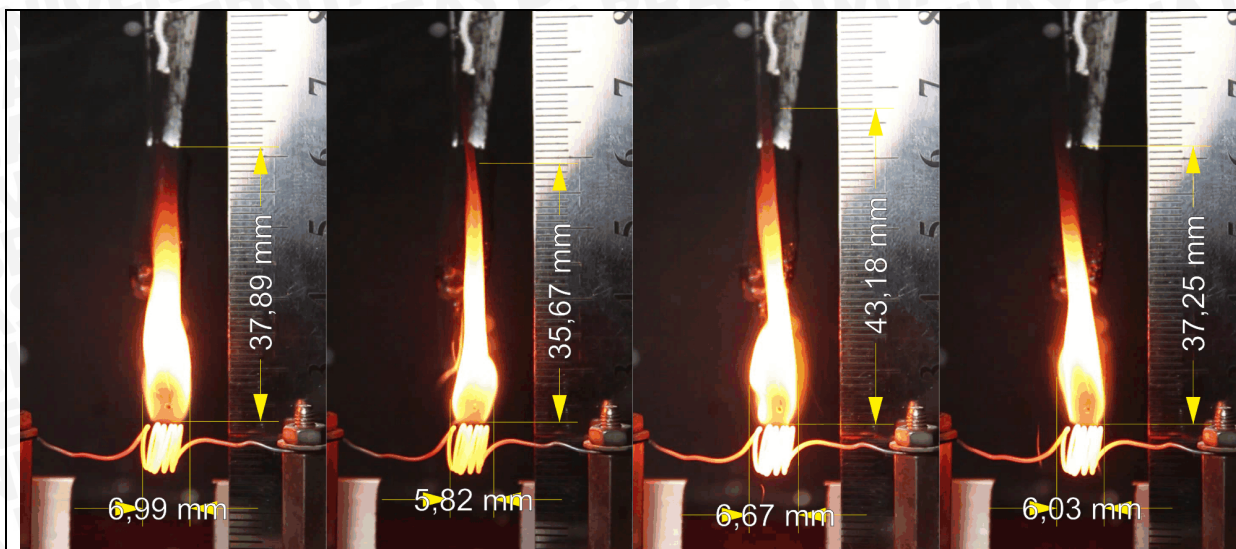


Visualisasi nyala api bahan bakar dengan campuran minyak cengkeh 1%

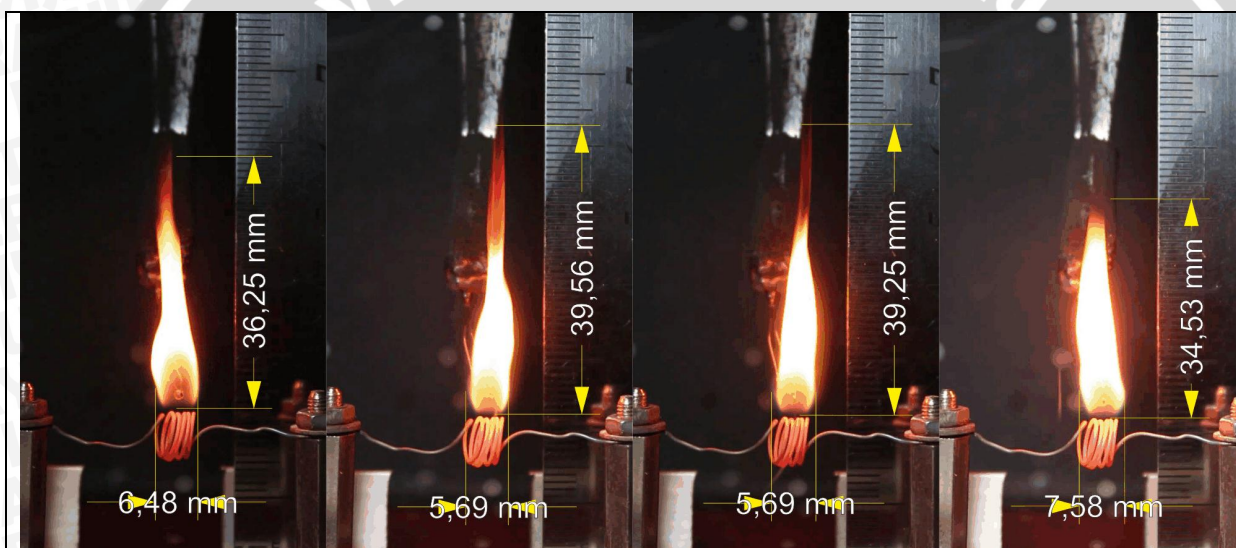


Visualisasi nyala api bahan bakar dengan campuran minyak cengkeh 2%





Visualisasi nyala api bahan bakar dengan campuran minyak cengkeh 3%



Visualisasi nyala api bahan bakar dengan campuran minyak cengkeh 4%