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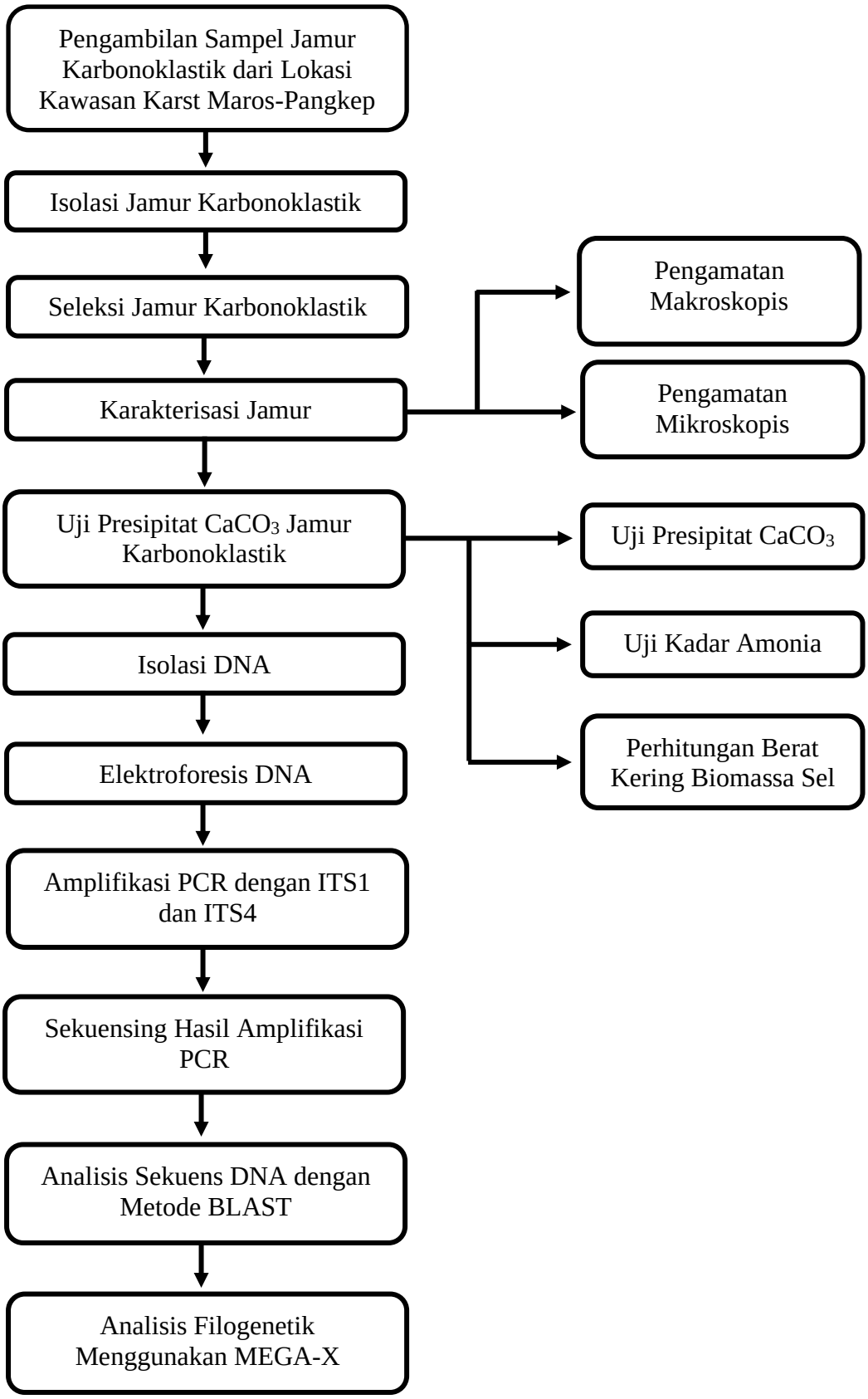
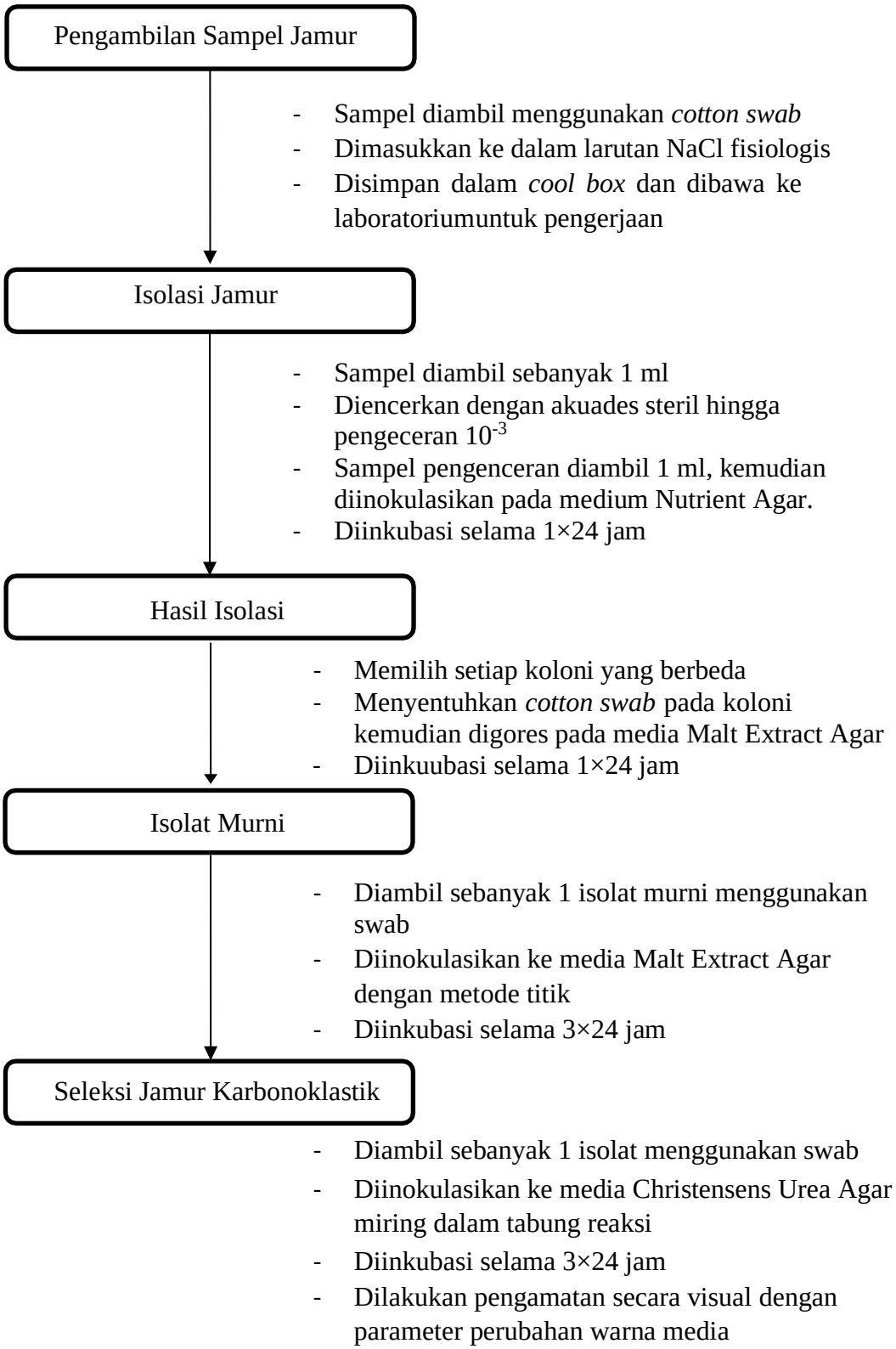
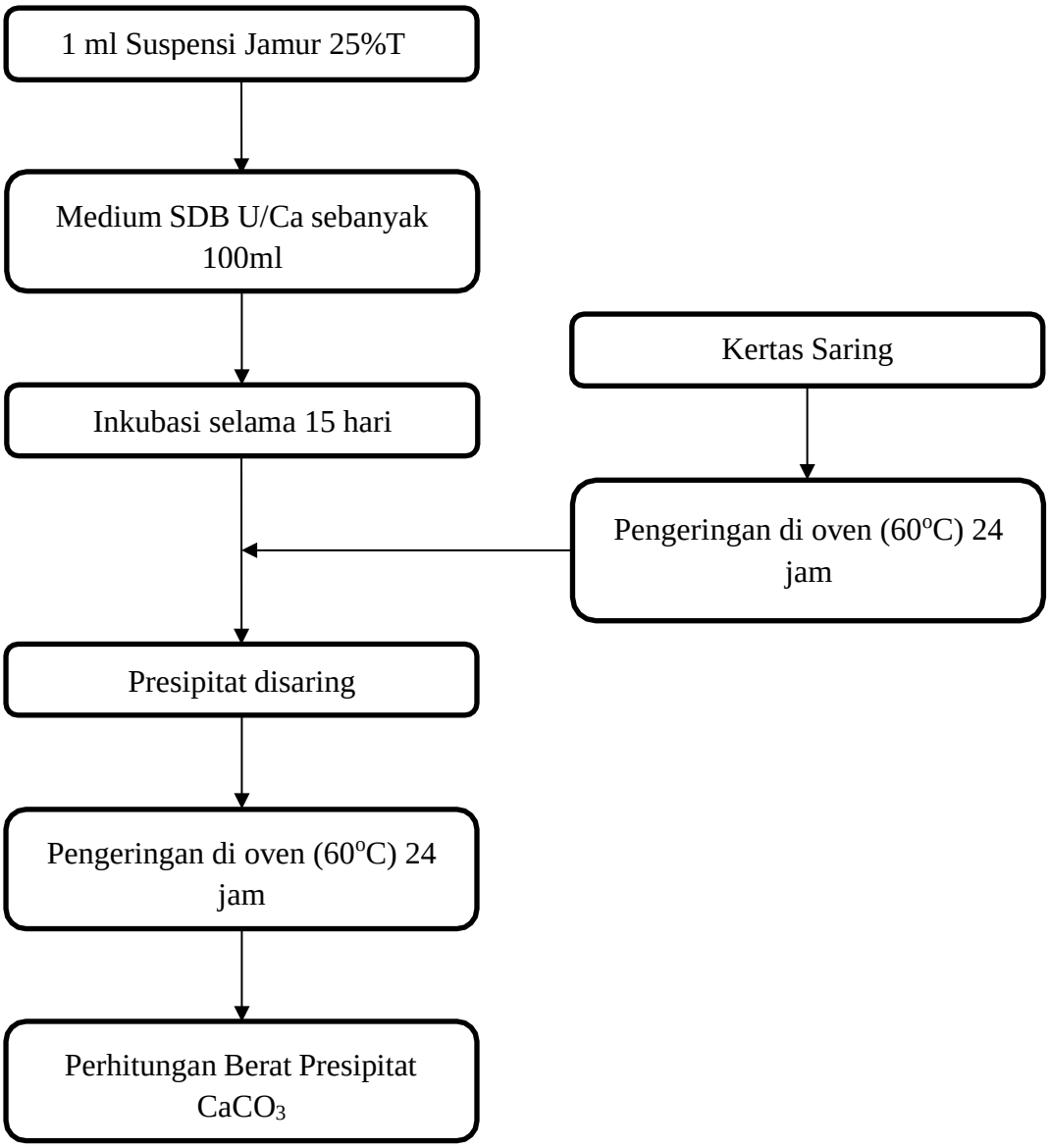
Lampiran 1. Skema Kerja Penelitian



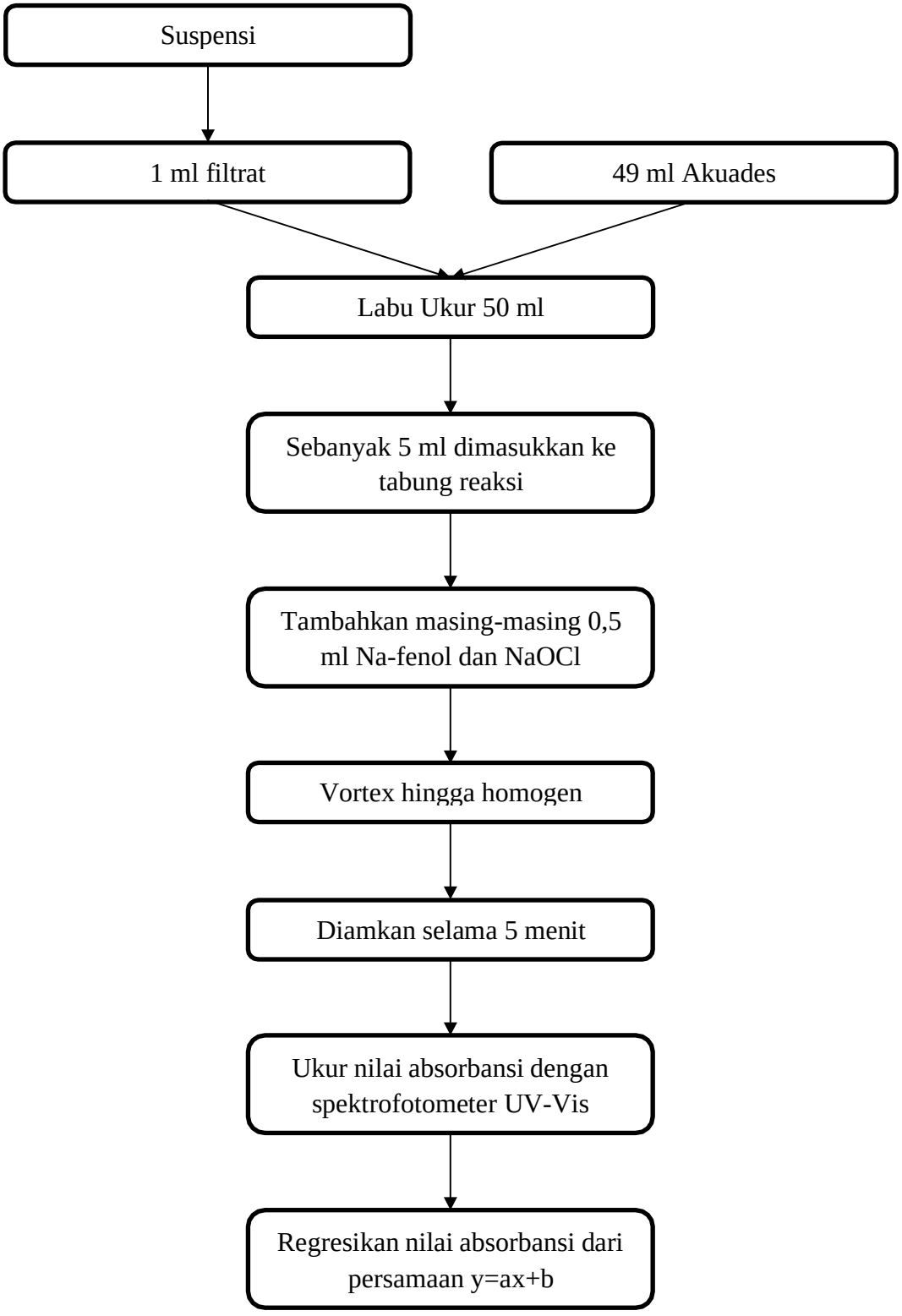
Lampiran 2. Skema Kerja Pengambilan Sampel, Isolasi dan Seleksi Jamur Karbonoklastik



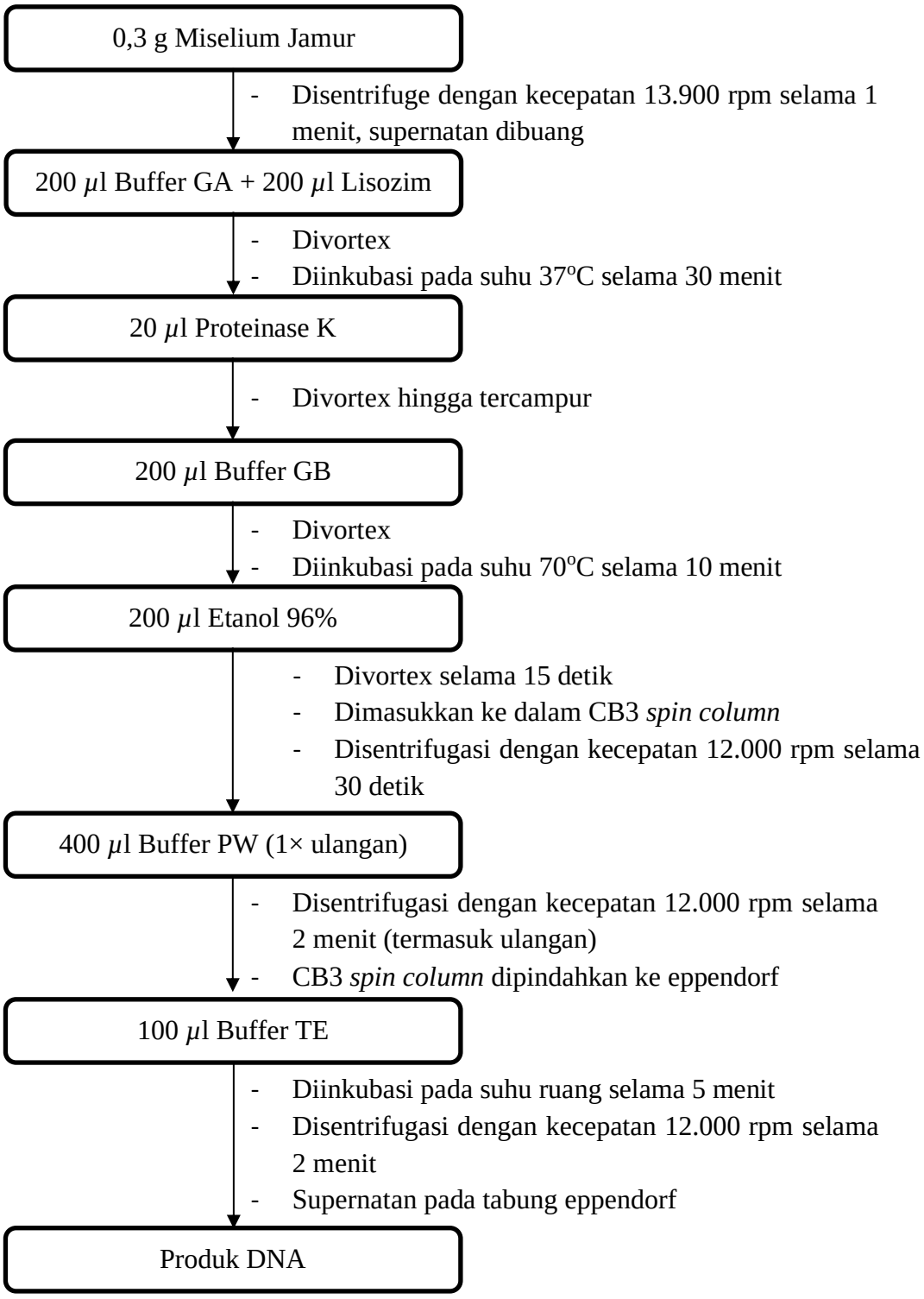
Lampiran 3. Skema Kerja Uji Presipitat $CaCO_3$ yang dihasilkan Jamur Karbonoklastik



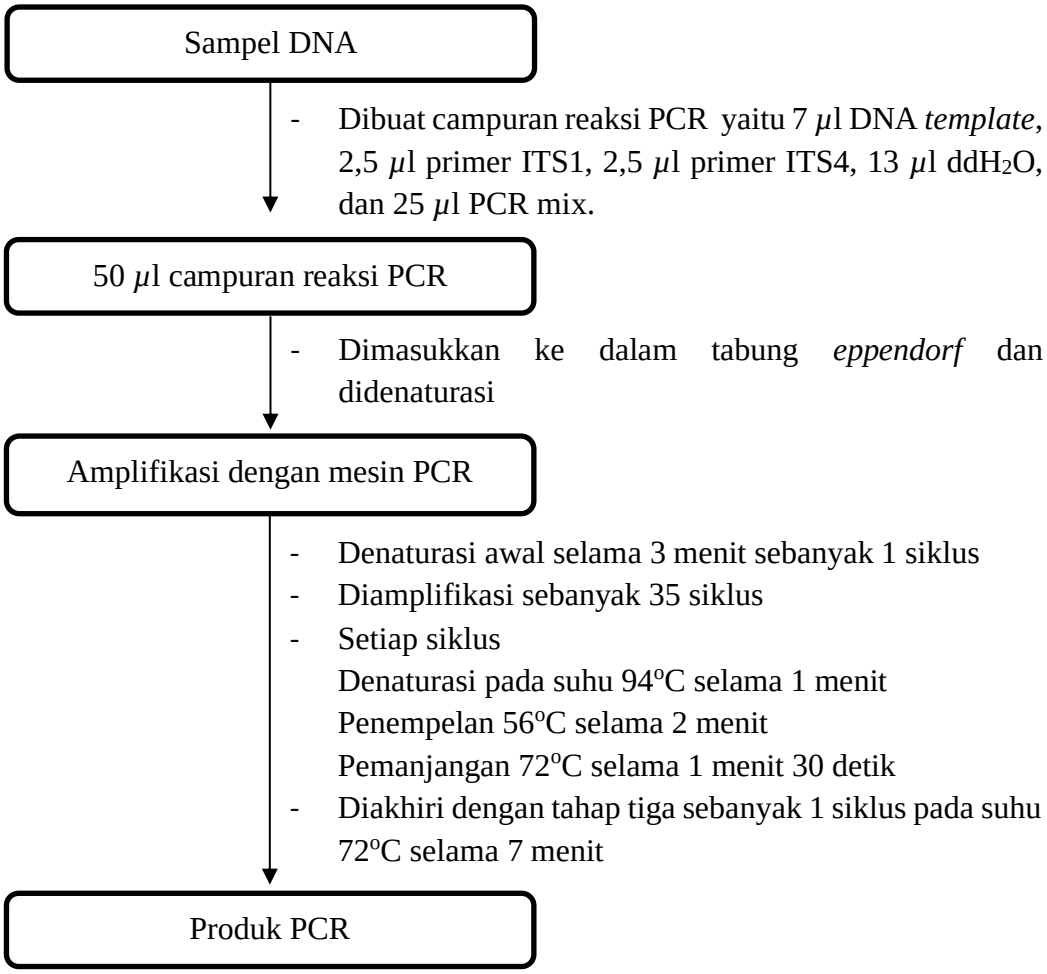
Lampiran 4. Skema Kerja Uji Kadar Amonia yang dihasilkan Jamur Karbonoklastik



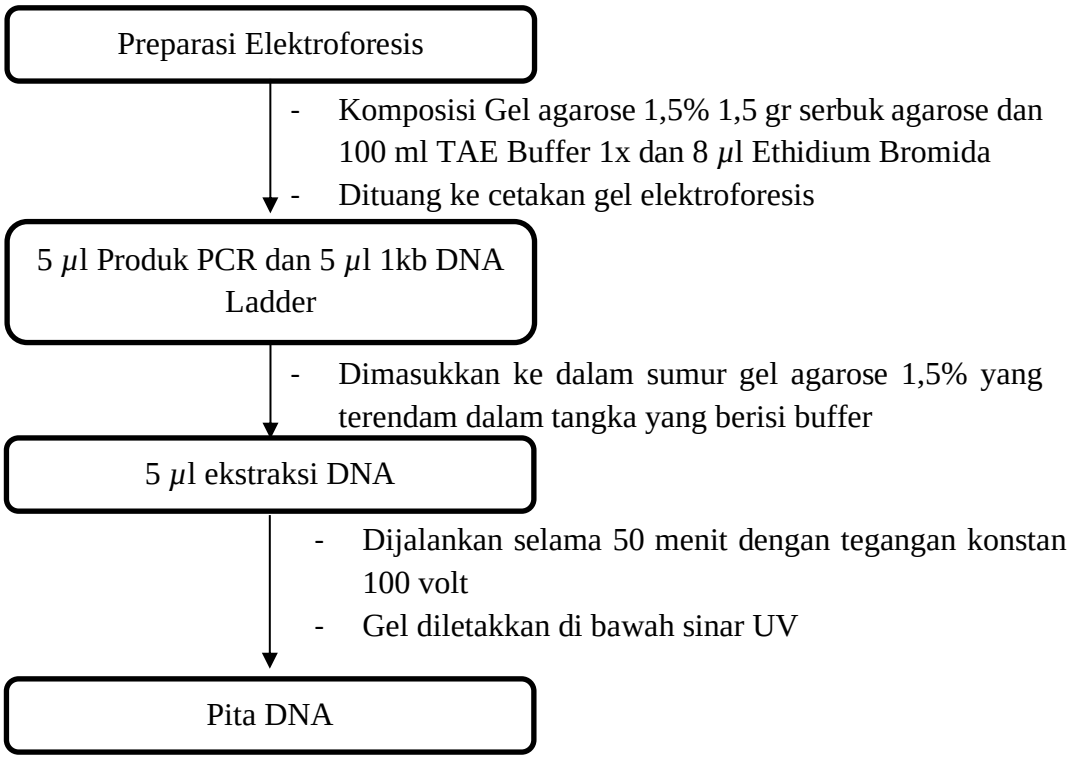
Lampiran 5. Skema Kerja Isolasi DNA Jamur



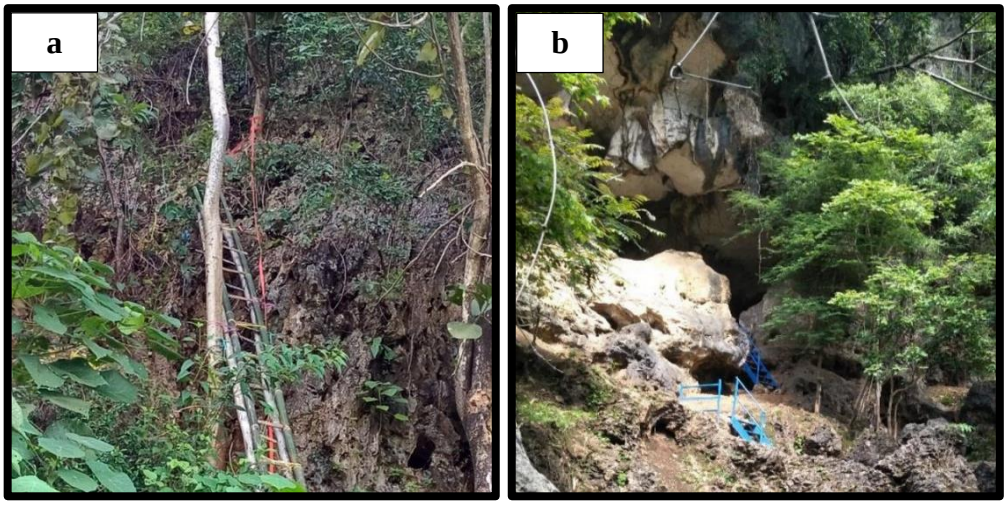
Lampiran 6. Skema Kerja Amplifikasi ITS dengan PCR



Lampiran 7. Skema Kerja Visualisasi Produk PCR dengan Elektroforesis

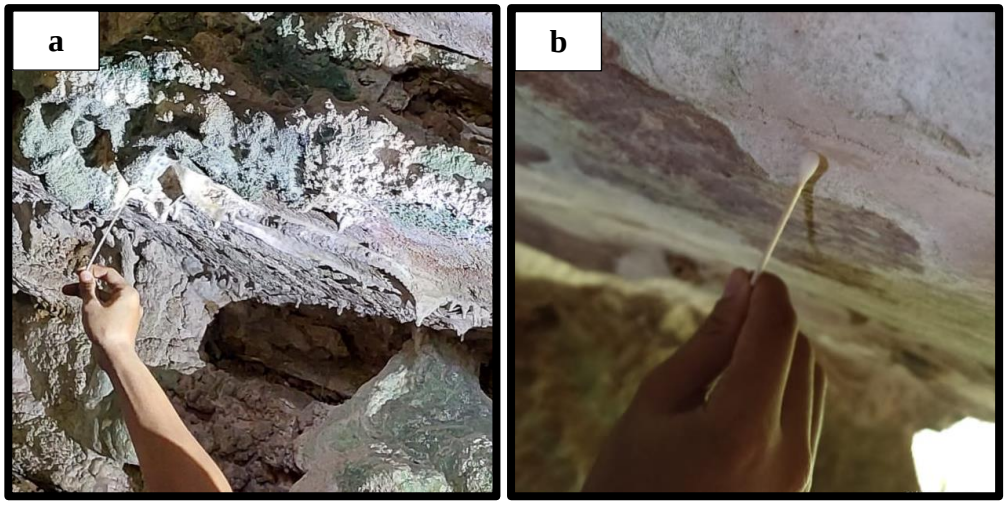


Lampiran 8. Tempat Pengambilan Sampel



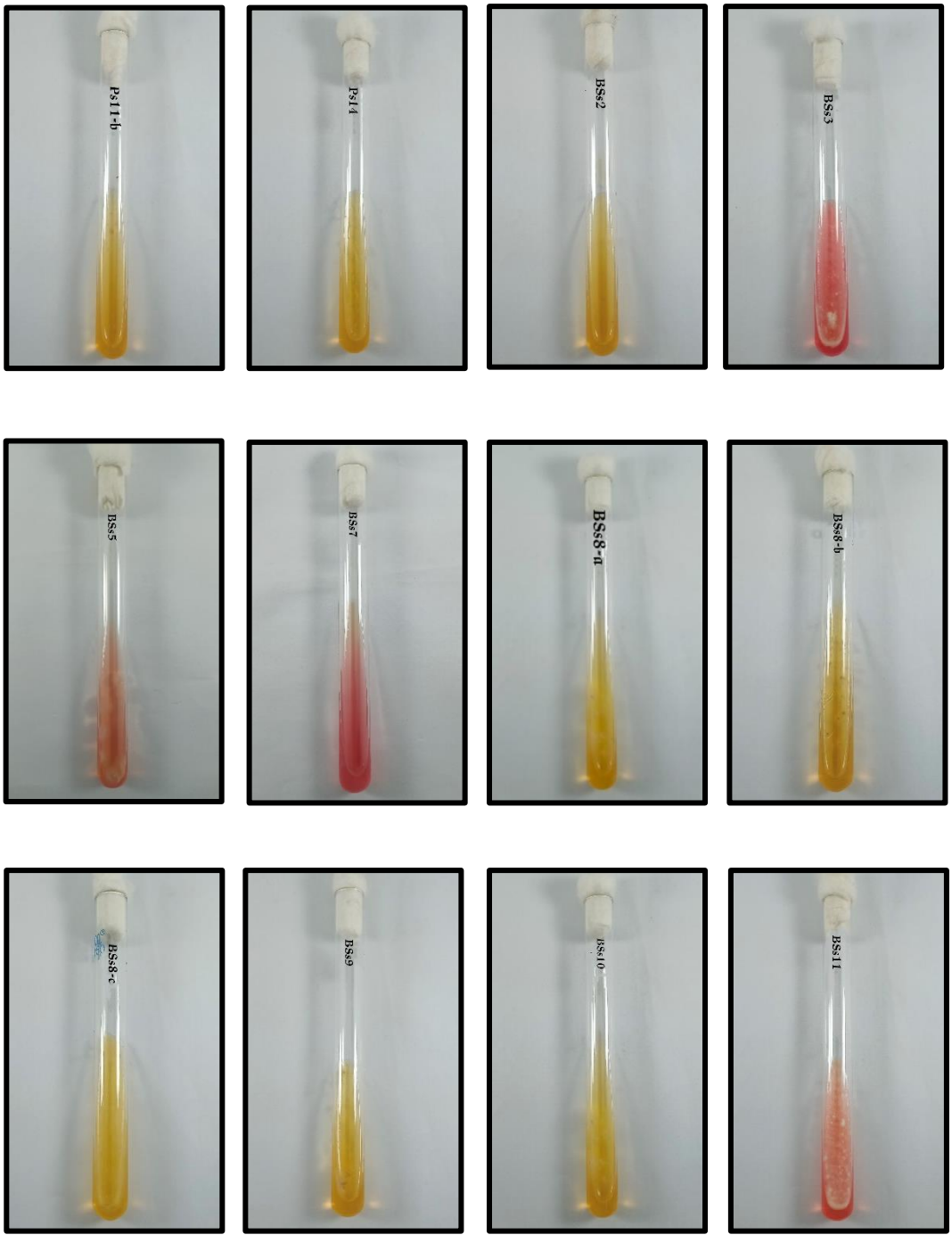
Tempat Pengambilan Sampel (a) gua Parewe, (b) gua Bulu Sipong

Lampiran 9. Pengambilan Sampel

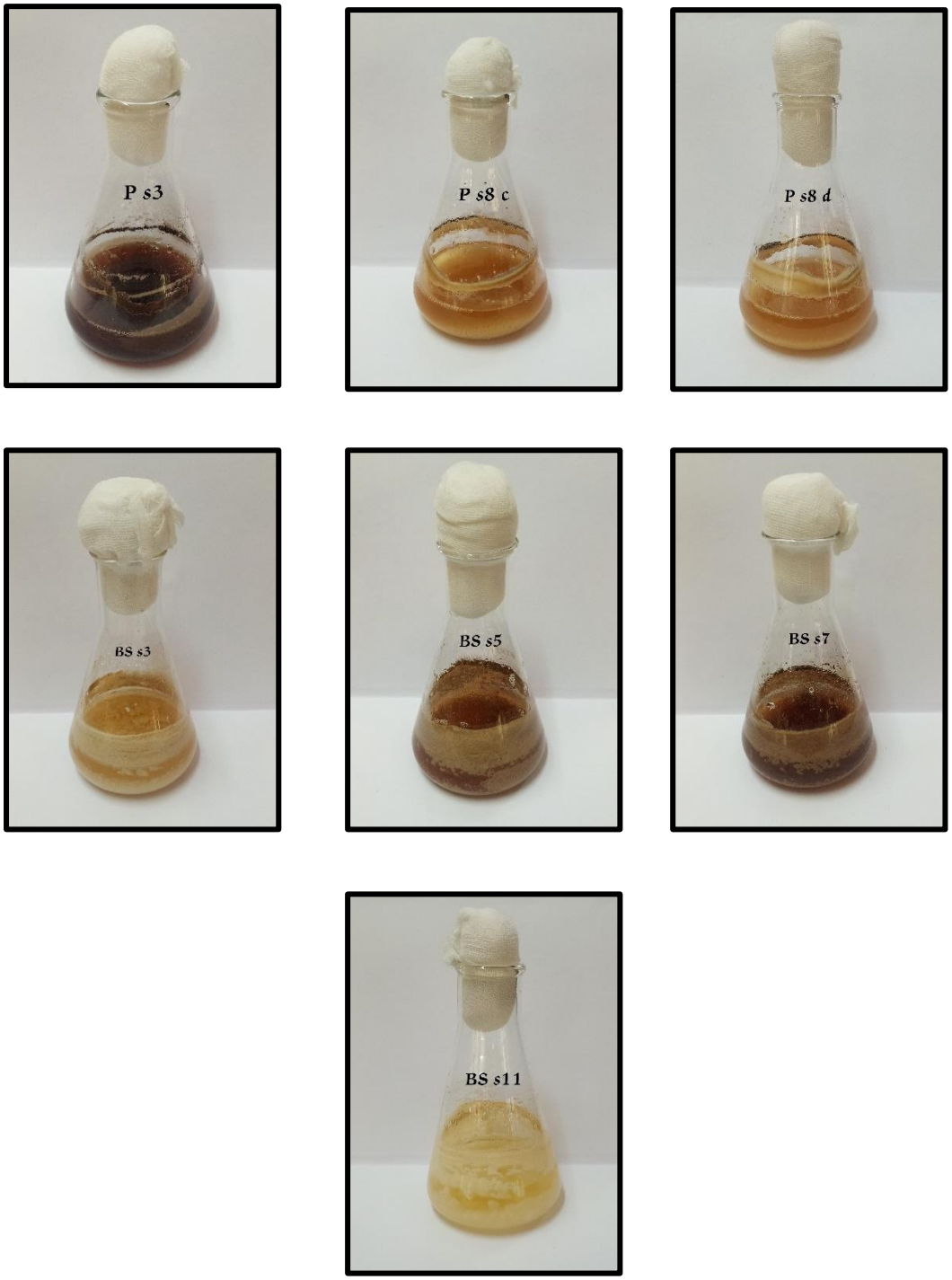


Titik Pengambilan Sampel (a) gua Parewe, (b) gua Bulu Sipong

Lampiran 10. Hasil Seleksi Jamur Karbonoklastik

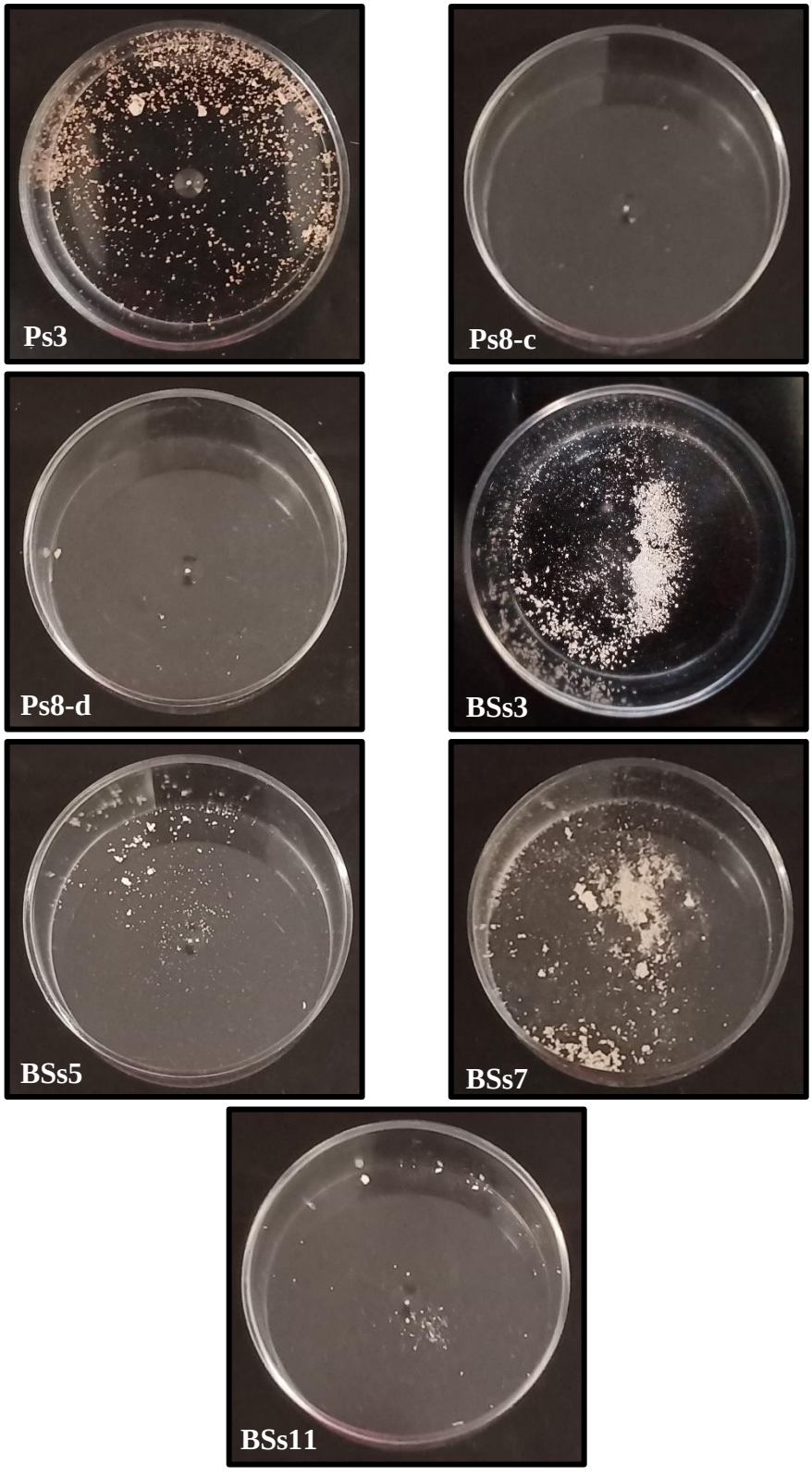

Ps11-b
Ps14
BSs2
BSs3
BSs5
BSs7
BSs8-a
BSs8-b
BSs8-c
BSs9
BSs10
BSs11

Lampiran 11. Uji Potensi Presipitat $CaCO_3$ oleh Jamur Karbonoklastik

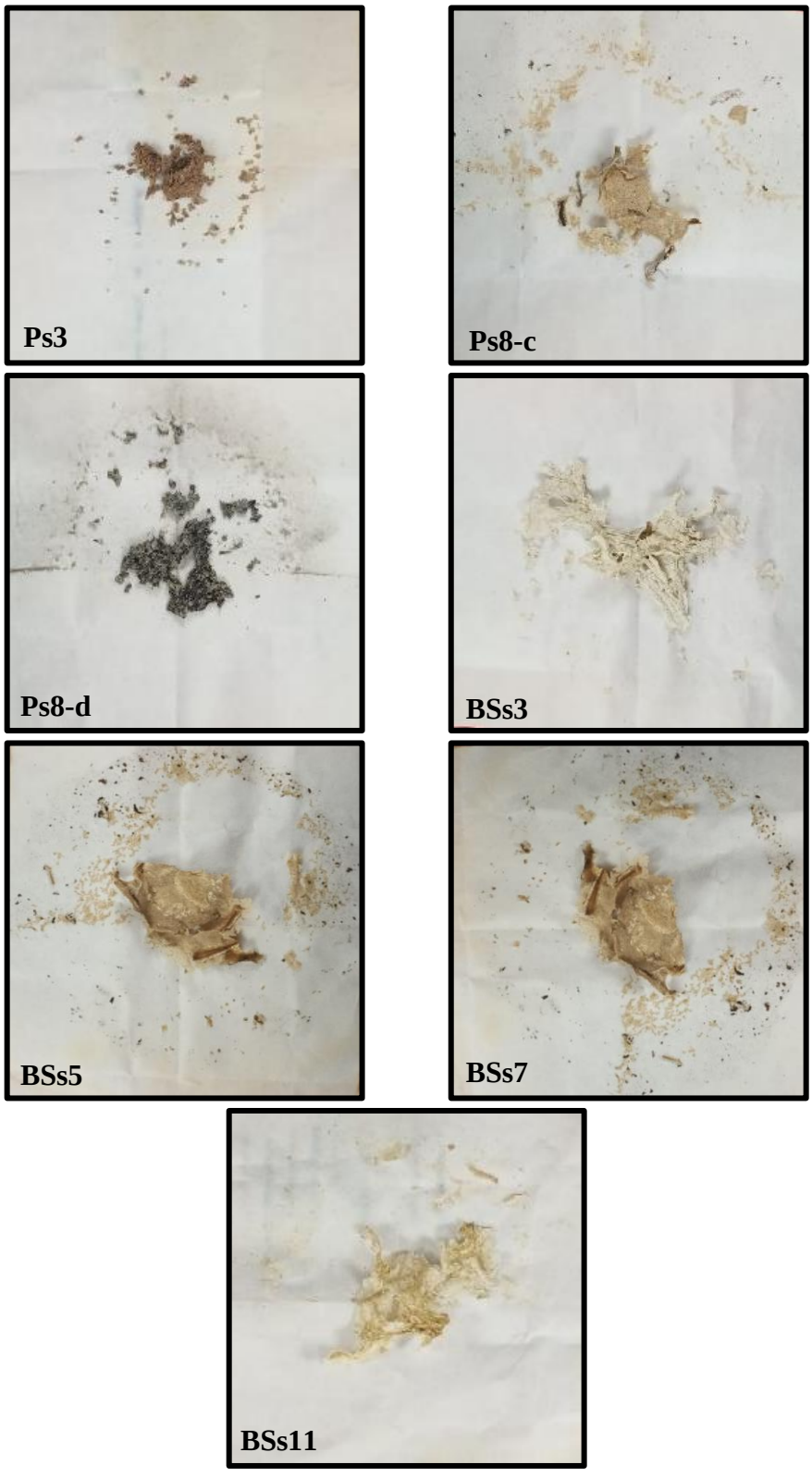


Kultur Isolat Jamur Karbonoklastik pada Media SDB U/Ca

Lampiran 12. Presipitat yang dihasilkan oleh Jamur Karbonoklastik



Lampiran 13. Berat Kering Biomassa Sel Jamur Karbonoklastik



Lampiran 14. Hasil Perhitungan Berat Presipitat $CaCO_3$

Isolat	Berat Presipitat (mg)		
	Berat Presipitat dan Berat Kertas Saring (Wfc)	**Berat Kertas Saring (Wf)**	**Berat Presipitat (Wc)**
Ps3	1.943,20	1.862,90	80,30
Ps8-c	1.758,40	1.751,90	6,50
Ps8-d	1.899,50	1.895,90	3,60
BSs3	1.788,50	1.778,40	10,10
BSs5	1.811,30	1.804,60	6,70
BSs7	1.831,60	1.821,00	10,60
BSs11	1.791,20	1.787,80	3,40

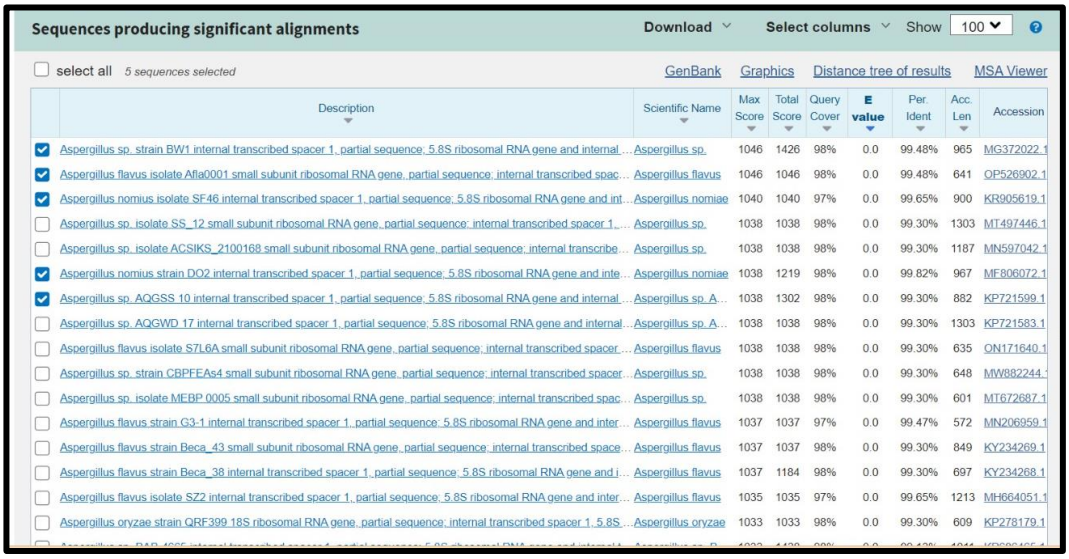
Lampiran 15. Hasil Perhitungan Analisa Kadar Amonia

No	Isolat	Pengenceran			Absorbansi	Slope	Intercep	y	Kadar N-NH_3	
		Sampel	H_2O	P	x	a	b		ppm	mMol
1	Ps3	1	49	50	0.338	41.106	0.1403	14.034128	701.7064	50.1219
2	Ps8-c	1	49	50	0.283	41.106	0.1403	11.773298	588.6649	42.0475
3	Ps8-d	1	49	50	0.325	41.106	0.1403	13.49975	674.9875	48.2134
4	BSs3	1	49	50	0.361	41.106	0.1403	14.979566	748.9783	53.4985
5	BSs5	1	49	50	0.338	41.106	0.1403	14.034128	701.7064	50.1219
6	BSs7	1	49	50	0.388	41.106	0.1403	16.089428	804.4714	57.4622
7	BSs11	1	49	50	0.258	41.106	0.1403	10.745648	537.2824	38.3773

Lampiran 16. Hasil Perhitungan Berat Kering Biomassa Sel Jamur Karbonoklastik

Isolat	Berat Biomassa Sel (mg)		
	Berat Presipitat dan Berat Kertas Saring (Wfc)	**Berat Kertas Saring (Wf)**	**Berat Presipitat (Wc)**
Ps3	2.186,00	1.852,20	333,80
Ps8-c	2.440,00	1.715,20	724,80
Ps8-d	2.386,10	1.794,50	591,60
BSs3	3.410,50	1.881,60	1.528,90
BSs5	2.958,70	1.873,80	1.084,90
BSs7	2.587,10	1.884,20	702,90
BSs11	2.386,10	1.824,20	561,90

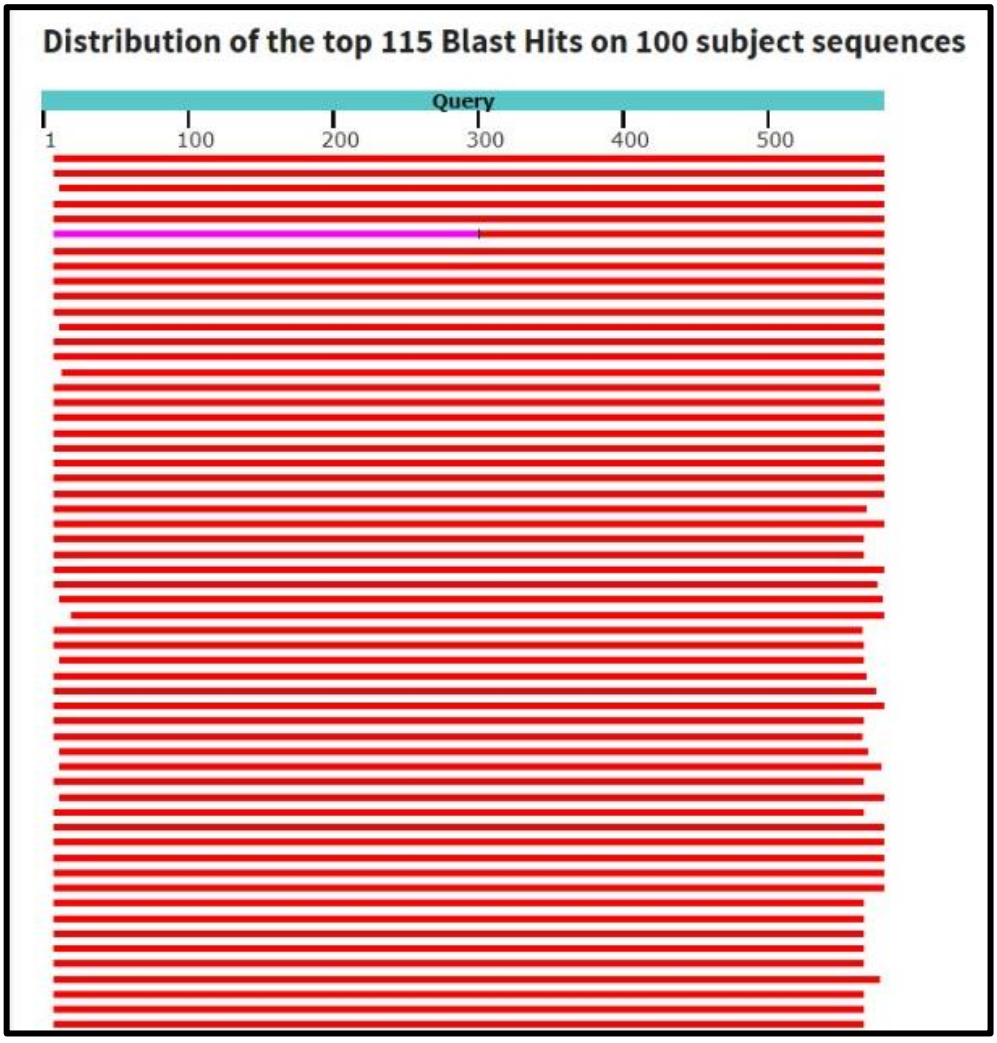
Lampiran 17. Identifikasi Jenis Jamur Menggunakan Marka Molekuler



Sequences producing significant alignments Download Select columns Show 100

select all *5 sequences selected* GenBank Graphics Distance tree of results MSA Viewer

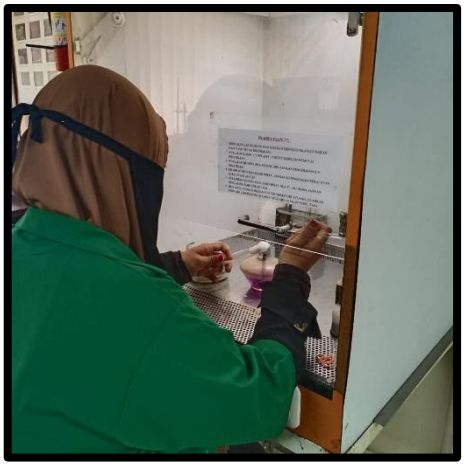
Description	Scientific Name	Max Score	Total Score	Query Cover	E value	Per. Ident	Acc. Len	Accession
Aspergillus sp. strain BW1 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and internal ...	Aspergillus sp.	1046	1426	98%	0.0	99.48%	965	MG372022.1
Aspergillus flavus isolate Afla0001 small subunit ribosomal RNA gene, partial sequence; internal transcribed spac...	Aspergillus flavus	1046	1046	98%	0.0	99.48%	641	OP526902.1
Aspergillus nomius isolate SF46 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and int...	Aspergillus nomiae	1040	1040	97%	0.0	99.65%	900	KR905619.1
Aspergillus sp. isolate SS_12 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1,...	Aspergillus sp.	1038	1038	98%	0.0	99.30%	1303	MT497446.1
Aspergillus sp. isolate ACSIKS_2100168 small subunit ribosomal RNA gene, partial sequence; internal transcribe...	Aspergillus sp.	1038	1038	98%	0.0	99.30%	1187	MN597042.1
Aspergillus nomius strain DO2 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and inte...	Aspergillus nomiae	1038	1219	98%	0.0	99.82%	967	MF806072.1
Aspergillus sp. AQGSS 10 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and internal ...	Aspergillus sp. A...	1038	1302	98%	0.0	99.30%	882	KP721599.1
Aspergillus sp. AQGWD 17 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and internal...	Aspergillus sp. A...	1038	1038	98%	0.0	99.30%	1303	KP721583.1
Aspergillus flavus isolate S7L6A small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer...	Aspergillus flavus	1038	1038	98%	0.0	99.30%	635	ON171640.1
Aspergillus sp. strain CBPFEAs4 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer...	Aspergillus sp.	1038	1038	98%	0.0	99.30%	648	MW882244.1
Aspergillus sp. isolate MEBP 0005 small subunit ribosomal RNA gene, partial sequence; internal transcribed spac...	Aspergillus sp.	1038	1038	98%	0.0	99.30%	601	MT672687.1
Aspergillus flavus strain G3-1 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and inter...	Aspergillus flavus	1037	1037	97%	0.0	99.47%	572	MN206959.1
Aspergillus flavus strain Beca_43 small subunit ribosomal RNA gene, partial sequence; internal transcribed space...	Aspergillus flavus	1037	1037	98%	0.0	99.30%	849	KY234269.1
Aspergillus flavus strain Beca_38 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and i...	Aspergillus flavus	1037	1184	98%	0.0	99.30%	697	KY234268.1
Aspergillus flavus isolate SZ2 internal transcribed spacer 1, partial sequence; 5.8S ribosomal RNA gene and inter...	Aspergillus flavus	1035	1035	97%	0.0	99.65%	1213	MH664051.1
Aspergillus oryzae strain QRF399 18S ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ...	Aspergillus oryzae	1033	1033	98%	0.0	99.30%	609	KP278179.1



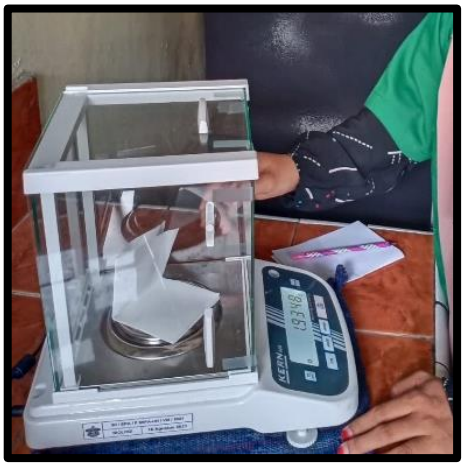
Hasil Sekuensing Isolat Jamur Ps3

Lampiran 18. Foto Prosedur Penelitian

Tahapan Isolasi Jamur Karbonoklastik



Tahapan Seleksi Jamur Karbonoklastik



Tahapan Perhitungan Presipitat $CaCO_3$ dan Biomassa Sel

Pengukuran Nilai Absorban Larutan Kurva Standar dan Kadar Amonia Kultur Jamur Menggunakan Spektrofotometer UV-Vis

Tahapan Identifikasi Jamur Karbonoklastik dengan Menggunakan Marka Molekuler