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LAMPIRAN

LAMPIRAN 1

Perhitungan Karbon Tanah

Penggunaan Lahan		Kedalaman (cm)	BB total + Berat Ring (g)	Berat Ring (g)	BB total tanah (g) (W1)	BB sub tanah (g) (W2)	BKO sub tanah (g) (W3)	Volume (cm ³) (V)	BKO tanah (W)	BI (g/cm ³)	Massa Tanah (ton/ha) (MTn)	Massa Tanah (ton/ha) (MTn) rata-rata	C-Organik (%)	C (C/ton tanah) (MCn)	C (ton/ha) (MCTn)	C Penggunaan Lahan (ton/ha)		
PJ1	Pertanian Jagung	UL 1	0-10	2056	519	1537	100	75.36	1000	1158.28	1.16	1158				73		
			10-20	2095	519	1576	100	76.09	1000	1199.18	1.20	1199						
			20-30	2125	519	1606	100	77.15	1000	1239.03	1.24	1239						
													0-10	1138	2.28		0.023	26
		UL 2	0-10	2071	519	1552	100	72.51	1000	1125.36	1.13	1125						
			10-20	2124	519	1605	100	73.58	1000	1180.96	1.18	1181	10-20	1189	2.06		0.021	24
	20-30		2156	519	1637	100	74.66	1000	1222.18	1.22	1222							
	UL 3	0-10	2022	519	1503	100	75.18	1000	1129.96	1.13	1130	20-30	1240	1.88	0.019		23	
		10-20	2093	519	1574	100	75.37	1000	1186.32	1.19	1186							
		20-30	2151	519	1632	100	77.04	1000	1257.29	1.26	1257							
	PJ2	Pertanian Jagung	UL 1	0-10	2170	519	1651	100	81.61	1000	1347.38	1.35	1347					71
				10-20	2166	519	1647	100	83.1	1000	1368.66	1.37	1369					
20-30				2146	519	1627	100	87.5	1000	1423.63	1.42	1424						
											0-10	1218	2.18	0.022	27			
UL 2			0-10	2076	519	1557	100	75.61	1000	1177.25	1.18	1177						
			10-20	2140	519	1621	100	76.89	1000	1246.39	1.25	1246	10-20	1280	2.02	0.020	26	
		20-30	2286	519	1767	100	74.31	1000	1313.06	1.31	1313							
UL 3		0-10	1946	519	1427	100	79.22	1000	1130.47	1.13	1130	20-30	1352	1.32	0.013	18		
		10-20	2153	519	1634	100	74.88	1000	1223.54	1.22	1224							
		20-30	2284	519	1765	100	74.83	1000	1320.75	1.32	1321							
PK		Pertanian Kebun Campuran	UL 1	0-10	2121	519	1602	100	70.91	1000	1135.98	1.14	1136				79	
				10-20	2136	519	1617	100	75.94	1000	1227.95	1.23	1228					
	20-30			2186	519	1667	100	75.64	1000	1260.92	1.26	1261						
												0-10	1130	2.62	0.026	30		
	UL 2		0-10	2081	519	1562	100	71.45	1000	1116.05	1.12	1116						
			10-20	2120	519	1601	100	74.13	1000	1186.82	1.19	1187	10-20	1182	2.08	0.021		25
		20-30	2142	519	1623	100	74.76	1000	1213.35	1.21	1213							
	UL 3	0-10	2098	519	1579	100	72.04	1000	1137.51	1.14	1138	20-30	1223	2.00	0.020	24		
		10-20	2063	519	1544	100	73.26	1000	1131.13	1.13	1131							
		20-30	2137	519	1618	100	73.82	1000	1194.41	1.19	1194							

Penggunaan Lahan		Kedalaman (cm)	BB total + Berat Ring (g)	Berat Ring (g)	BB total tanah (g) (W1)	BB sub tanah (g) (W2)	BKO sub tanah (g) (W3)	Volume (cm ³) (V)	BKO tanah (W)	BI (g/cm ³)	Massa Tanah (ton/ha) (MTn)	Massa Tanah (ton/ha) (Mtn)	C-Organik (%)	C (C/ton tanah) (MCn)	C (ton/ha) (MCTn)	C Penggunaan Lahan (ton/ha)	
		rata-rata															
HP	Hutan Tanaman Industri Pinus	UL 1	0-10	1849	519	1330	100	80.53	1000	1071.05	1.07	1071				80	
			10-20	1881	519	1362	100	81.81	1000	1114.25	1.11	1114					
			20-30	1994	519	1475	100	84.82	1000	1251.10	1.25	1251					
		UL 2	0-10	1848	519	1329	100	80.71	1000	1072.64	1.07	1073					80
			10-20	1885	519	1366	100	81.24	1000	1109.74	1.11	1110					
			20-30	1927	519	1408	100	83.93	1000	1181.73	1.18	1182					
		UL 3	0-10	1839	519	1320	100	79.97	1000	1055.60	1.06	1056					80
			10-20	1873	519	1354	100	80.84	1000	1094.57	1.09	1095					
			20-30	1952	519	1433	100	82.86	1000	1187.38	1.19	1187					
HS	Hutan Sekunder	UL 1	0-10	2168	519	1649	100	70.09	1000	1155.78	1.16	1156				97	
			10-20	2183	519	1664	100	71.66	1000	1192.42	1.19	1192					
			20-30	2208	519	1689	100	71.54	1000	1208.31	1.21	1208					
		UL 2	0-10	2046	519	1527	100	69.34	1000	1058.82	1.06	1059					97
			10-20	2068	519	1549	100	70.41	1000	1090.65	1.09	1091					
			20-30	2046	519	1527	100	70.88	1000	1082.34	1.08	1082					
		UL 3	0-10	2202	519	1683	100	68.15	1000	1146.96	1.15	1147					97
			10-20	2184	519	1665	100	69.69	1000	1160.34	1.16	1160					
			20-30	2294	519	1775	100	70.08	1000	1243.92	1.24	1244					
PC	Pertanian Cengkeh	UL 1	0-10	1911	519	1392	100	70.2	1000	977.18	0.98	977				78	
			10-20	1926	519	1407	100	73.67	1000	1036.54	1.04	1037					
			20-30	1931	519	1412	100	75.62	1000	1067.75	1.07	1068					
		UL 2	0-10	1926	519	1407	100	70.87	1000	997.14	1.00	997					78
			10-20	1981	519	1462	100	72.45	1000	1059.22	1.06	1059					
			20-30	1985	519	1466	100	74.81	1000	1096.71	1.10	1097					
		UL 3	0-10	1891	519	1372	100	71.5	1000	980.98	0.98	981					78
			10-20	1840	519	1321	100	75.2	1000	993.39	0.99	993					
			20-30	1983	519	1464	100	79.05	1000	1157.29	1.16	1157					

LAMPIRAN 2

Pengolahan Data Emisi CO₂

Lokasi PJ1 (Pertanian Jagung)

Pengamatan 1										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	941.56	30.5	5	1023.68	30.1	5	981.84	30.3	V	0.0016
10	1006.09	30.7	10	1089.10	30.4	10	1037.95	30.9	A	1.5700
15	1057.82	31	15	1151.39	30.7	15	1104.60	31	V/A	0.001
									α	0.27
T		30.7	T		30.4	T		30.73		
Δc/Δt	11.626		Δc/Δt	12.771		Δc/Δt	12.276			
F	0.0056	menit	F	0.0061	menit	F	0.0059	menit		
	0.3351	jam		0.3686	jam		0.3539	jam		
	8.0435	hari		8.8454	hari		8.4933	hari		
				0.006						
				0.353						
				8.461	(g/m ² /hari)					
Pengamatan 2										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	828.89	31.5	5	856.06	31.1	5	814.08	31.3	V	0.0016
10	862.33	31.7	10	890.08	31.5	10	851.59	31.8	A	1.5700
15	924.15	32	15	951.04	31.8	15	907.26	32	V/A	0.001
									α	0.27
T		31.7	T		31.47	T		31.7		
Δc/Δt	9.526		Δc/Δt	9.498		Δc/Δt	8.918			
F	0.0046	menit	F	0.0046	menit	F	0.0043	menit		
	0.2737	jam		0.2731	jam		0.2563	jam		
	6.5690	hari		6.5554	hari		6.1504	hari		
				0.004						
				0.268						
				6.425	(g/m ² /hari)					
Pengamatan 3										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	968.55	28.3	5	1025.49	28.6	5	976.19	28.7	V	0.0016
10	1059.21	28.3	10	1121.90	28.7	10	1074.47	28.9	A	1.5700
15	1090.57	28.3	15	1155.02	28.8	15	1107.27	28.3	V/A	0.001
									α	0.27
T		28.3	T		28.7	T		28.63		
Δc/Δt	12.202		Δc/Δt	12.953		Δc/Δt	13.108			
F	0.0059	menit	F	0.0063	menit	F	0.0063	menit		
	0.3546	jam		0.3759	jam		0.3805	jam		
	8.5102	hari		9.0220	hari		9.1320	hari		
				0.006						
				0.370						
				8.888	(g/m ² /hari)					

Lokasi PJ2 (Pertanian Jagung)

Pengamatan 1										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	923.67	30.1	5	914.32	30.4	5	974.43	30.5	V	0.0016
10	983.65	30.5	10	971.32	30.5	10	1027.78	30.6	A	1.5700
15	1026.67	30.8	15	1012.85	30.7	15	1068.03	30.8	V/A	0.001
									α	0.27
T		30.5	T		30.53	T		30.63		
Δc/Δt	10.3		Δc/Δt	9.853		Δc/Δt	9.36			
F	0.0050	menit	F	0.0047	menit	F	0.0045	menit		
	0.2972	jam		0.2842	jam		0.2699	jam		
	7.1324	hari		6.8214	hari		6.4779	hari		
			menit	0.005						
			jam	0.284						
			hari	6.811	(g/m ² /hari)					
Pengamatan 2										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	847.12	31.2	5	872.01	31.1	5	894.44	31.2	V	0.0016
10	860.02	31.7	10	888.80	31.6	10	910.19	31.4	A	1.5700
15	931.51	32	15	972.01	31.9	15	962.35	31.9	V/A	0.001
									α	0.27
T		31.6	T		31.53	T		31.5		
Δc/Δt	8.439		Δc/Δt	10		Δc/Δt	6.791			
F	0.0040	menit	F	0.0048	menit	F	0.0033	menit		
	0.2426	jam		0.2875	jam		0.1953	jam		
	5.8213	hari		6.9004	hari		4.6866	hari		
			menit	0.00						
			jam	0.24						
			hari	5.80	(g/m ² /hari)					
Pengamatan 3										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	986.62	28.4	5	1016.30	28.5	5	909.75	28.4	V	0.0016
10	1025.69	28.8	10	1054.14	28.8	10	946.06	28.6	A	1.5700
15	1091.41	28.9	15	1133.50	28.8	15	1006.90	28.9	V/A	0.001
									α	0.27
T		28.7	T		28.7	T		28.63		
Δc/Δt	10.479		Δc/Δt	11.72		Δc/Δt	9.715			
F	0.0051	menit	F	0.0057	menit	F	0.0047	menit		
	0.3041	jam		0.3401	jam		0.2820	jam		
	7.2988	hari		8.1632	hari		6.7682	hari		
			menit	0.005						
			jam	0.309						
			hari	7.410	(g/m ² /hari)					

Lokasi PK : Pertanian Kebun Campuran

Pengamatan 1										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	820.69	27.1	5	811.06	27	5	818.72	27.6	V	0.0016
10	836.95	27.4	10	830.35	27.5	10	833.02	27.8	A	1.5700
15	883.36	27.6	15	871.24	27.8	15	884.32	27.8	V/A	0.001
									α	0.27
T		27.4	T		27.43	T		27.73		
$\Delta c/\Delta t$	6.267		$\Delta c/\Delta t$	6.018		$\Delta c/\Delta t$	6.56			
F	0.0030	menit	F	0.0029	menit	F	0.0032	menit		
	0.1827	jam		0.1754	jam		0.1910	jam		
	4.3845	hari		4.2093	hari		4.5839	hari		
				0.003	menit					
				0.183	jam					
				4.393	hari					
					(g/m ² /hari)					
Pengamatan 2										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	778.92	26	5	818.12	26.1	5	834.30	26.3	V	0.0016
10	794.03	26.3	10	842.60	26.5	10	861.24	26.5	A	1.5700
15	828.43	26.8	15	889.98	26.8	15	892.45	26.6	V/A	0.001
									α	0.27
T		26.4	T		26.47	T		26.47		
$\Delta c/\Delta t$	4.951		$\Delta c/\Delta t$	7.186		$\Delta c/\Delta t$	5.815			
F	0.0024	menit	F	0.0035	menit	F	0.0028	menit		
	0.1448	jam		0.2101	jam		0.1700	jam		
	3.4754	hari		5.0425	hari		4.0805	hari		
				0.003	menit					
				0.175	jam					
				4.199	hari					
					(g/m ² /hari)					
Pengamatan 3										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	838.67	25.1	5	840.20	25.1	5	835.31	25.3	V	0.0016
10	874.82	25.5	10	870.67	25.6	10	869.72	25.5	A	1.5700
15	910.03	25.8	15	908.62	25.9	15	895.09	25.8	V/A	0.001
									α	0.27
T		25.5	T		25.53	T		25.53		
$\Delta c/\Delta t$	7.136		$\Delta c/\Delta t$	6.842		$\Delta c/\Delta t$	5.978			
F	0.0035	menit	F	0.0033	menit	F	0.0029	menit		
	0.2093	jam		0.2007	jam		0.1753	jam		
	5.0242	hari		4.8162	hari		4.2080	hari		
				0.003	menit					
				0.195	jam					
				4.683	hari					
					(g/m ² /hari)					

Lokasi HP : Hutan Tanaman Industri Pinus

Pengamatan 1										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	697.66	24	5	820.16	24.4	5	728.38	24	V	0.0016
10	718.92	24.3	10	849.12	24.8	10	759.18	24.7	A	1.5700
15	734.36	24.9	15	867.80	25	15	772.98	25.2	V/A	0.001
									α	0.27
T		24.4	T		24.73	T		24.63		
Δc/Δt	3.67		Δc/Δt	4.764		Δc/Δt	4.46			
F	0.0018	menit	F	0.0023	menit	F	0.0022	menit		
	0.1080	jam		0.1401	jam		0.1312	jam		
	2.5932	hari		3.3624	hari		3.1489	hari		
			menit	0.002						
			jam	0.126						
			hari	3.035	(g/m ² /hari)					

Pengamatan 2										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	804.11	25.4	5	710.42	25.2	5	612.14	25	V	0.0016
10	823.92	25.9	10	722.20	25.6	10	628.54	25.7	A	1.5700
15	847.09	26	15	751.64	25.8	15	649.85	25.9	V/A	0.001
									α	0.27
T		25.8	T		25.53	T		25.53		
Δc/Δt	4.298		Δc/Δt	4.12		Δc/Δt	3.77			
F	0.0021	menit	F	0.0020	menit	F	0.0018	menit		
	0.1260	jam		0.1209	jam		0.1106	jam		
	3.0230	hari		2.9015	hari		2.6544	hari		
			menit	0.002						
			jam	0.119						
			hari	2.860	(g/m ² /hari)					

Pengamatan 3										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	873.79	23.4	5	924.83	23.3	5	828.53	23	V	0.0016
10	909.56	23.5	10	949.42	23.7	10	856.17	23	A	1.5700
15	921.78	23.9	15	968.36	23.9	15	871.64	23	V/A	0.001
									α	0.27
T		23.6	T		23.63	T		23.0		
Δc/Δt	4.799		Δc/Δt	4.35		Δc/Δt	4.31			
F	0.0024	menit	F	0.0021	menit	F	0.0021	menit		
	0.1417	jam		0.1285	jam		0.1275	jam		
	3.4001	hari		3.0837	hari		3.0605	hari		
			menit	0.002						
			jam	0.133						
			hari	3.181	(g/m ² /hari)					

Lokasi HS : Hutan Sekunder

Pengamatan 1										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	773.09	24.2	5	728.88	24.1	5	660.03	24.3	V	0.0016
10	787.61	24.6	10	742.17	24.6	10	675.90	24.5	A	1.5700
15	810.24	24.8	15	767.54	24.9	15	699.37	24.8	V/A	0.001
									α	0.27
T		24.5	T		24.53	T		24.53		
Δc/Δt	3.715		Δc/Δt	3.866		Δc/Δt	3.934			
F	0.0018	menit	F	0.0019	menit	F	0.0019	menit		
	0.1093	jam		0.1138	jam		0.1158	jam		
	2.6238	hari		2.7305	hari		2.7785	hari		
				0.002						
				0.113						
				2.711	(g/m ² /hari)					

Pengamatan 2										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	700.35	25.4	5	684.88	25.5	5	630.64	25	V	0.0016
10	710.48	25.6	10	709.40	25.7	10	656.31	25.4	A	1.5700
15	727.50	26	15	723.05	26.1	15	669.52	25.9	V/A	0.001
									α	0.27
T		25.7	T		25.77	T		25.43		
Δc/Δt	2.7155		Δc/Δt	3.817		Δc/Δt	3.888			
F	0.0013	menit	F	0.0019	menit	F	0.0019	menit		
	0.0796	jam		0.1119	jam		0.1141	jam		
	1.9106	hari		2.6847	hari		2.7377	hari		
				0.002						
				0.102						
				2.444	(g/m ² /hari)					

Pengamatan 3										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	722.79	23.6	5	777.73	23.1	5	707.58	23	V	0.0016
10	734.46	23.7	10	791.22	23.5	10	723.43	23.4	A	1.5700
15	762.13	23.9	15	817.04	23.7	15	756.52	23.6	V/A	0.001
									α	0.27
T		23.7	T		23.43	T		23.33		
Δc/Δt	3.934		Δc/Δt	3.931		Δc/Δt	4.894			
F	0.0019	menit	F	0.0019	menit	F	0.0024	menit		
	0.1161	jam		0.1161	jam		0.1446	jam		
	2.7860	hari		2.7867	hari		3.4705	hari		
				0.002						
				0.126						
				3.014	(g/m ² /hari)					

Lokasi PA : Pertanian Cengkeh

Pengamatan 1										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	791.68	22.2	5	836.39	23	5	774.21	23.6	V	0.0016
10	808.42	22.5	10	847.97	23.4	10	782.20	23.9	A	1.5700
15	830.22	22.8	15	898.70	23.6	15	827.01	24.1	V/A	0.001
									α	0.27
T		22.5	T		23.33	T		23.87		
Δc/Δt	3.854		Δc/Δt	6.231		Δc/Δt	5.28			
F	0.0019	menit	F	0.0031	menit	F	0.0026	menit		
	0.1142	jam		0.1841	jam		0.1557	jam		
	2.7407	hari		4.4186	hari		3.7375	hari		
				0.003						
				jam	0.151					
				hari	3.632 (g/m ² /hari)					
Pengamatan 2										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	850.08	25	5	841.64	25.5	5	829.37	25.5	V	0.0016
10	878.20	25.4	10	868.31	26	10	852.28	25.9	A	1.5700
15	911.04	25.9	15	899.50	26.2	15	881.65	26	V/A	0.001
									α	0.27
T		25.4	T		25.9	T		25.8		
Δc/Δt	6.096		Δc/Δt	5.786		Δc/Δt	5.228			
F	0.0030	menit	F	0.0028	menit	F	0.0026	menit		
	0.1789	jam		0.1695	jam		0.1532	jam		
	4.2925	hari		4.0678	hari		3.6768	hari		
				0.003						
				jam	0.167					
				hari	4.012 (g/m ² /hari)					
Pengamatan 3										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	894.30	21.9	5	882.11	22	5	848.30	22.4	V	0.0016
10	932.50	22	10	917.71	22.2	10	878.68	22.6	A	1.5700
15	946.81	22.3	15	938.85	22.5	15	898.07	22.9	V/A	0.001
									α	0.27
T		22.1	T		22.23	T		22.63		
Δc/Δt	5.251		Δc/Δt	5.674		Δc/Δt	4.977			
F	0.0026	menit	F	0.0028	menit	F	0.0025	menit		
	0.1558	jam		0.1683	jam		0.1474	jam		
	3.7397	hari		4.0386	hari		3.5377	hari		
				0.003						
				jam	0.157					
				hari	3.772 (g/m ² /hari)					

Lokasi HPK : Hutan Tanaman Industri Pinus campur Kopi

Pengamatan 1										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	820.20	24	5	836.48	24.1	5	838.07	24.2	V	0.0016
10	832.64	24.5	10	854.22	24.6	10	862.71	24.3	A	1.5700
15	862.19	24.7	15	882.41	24.9	15	878.10	24.8	V/A	0.001
									α	0.27
T		24.4	T		24.5	T		24.4		
Δc/Δt	4.199		Δc/Δt	4.593		Δc/Δt	4.003			
F	0.0021	menit	F	0.0023	menit	F	0.0020	menit		
	0.1236	jam		0.1352	jam		0.1178	jam		
	2.9670	hari		3.2439	hari		2.8282	hari		
				0.002						
				jam	0.126					
				hari	3.013 (g/m ² /hari)					

Pengamatan 2										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	877.51	25.2	5	859.81	25	5	869.18	25.5	V	0.0016
10	919.87	25.3	10	904.28	25.3	10	917.41	25.8	A	1.5700
15	934.84	25.5	15	915.89	25.5	15	928.18	25.9	V/A	0.001
									α	0.27
T		25.3	T		25.3	T		25.7		
Δc/Δt	5.733		Δc/Δt	5.608		Δc/Δt	5.9			
F	0.0028	menit	F	0.0027	menit	F	0.0029	menit		
	0.1683	jam		0.1646	jam		0.1729	jam		
	4.0382	hari		3.9511	hari		4.1503	hari		
				0.003						
				jam	0.169					
				hari	4.047 (g/m ² /hari)					

Pengamatan 3										
P1			P2			P3			p	1.96
Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu	Interval Waktu	Konsentrasi CO ₂ (ppm)	Suhu		
5	743.74	23.5	5	720.75	23.4	5	720.75	23	V	0.0016
10	769.23	23.9	10	741.81	23.6	10	745.66	23.1	A	1.5700
15	793.74	23.6	15	766.75	23.7	15	768.61	23.5	V/A	0.001
									α	0.27
T		23.7	T		23.6	T		23.2		
Δc/Δt	5		Δc/Δt	4.6		Δc/Δt	4.786			
F	0.0025	menit	F	0.0023	menit	F	0.0024	menit		
	0.1476	jam		0.1358	jam		0.1415	jam		
	3.5417	hari		3.2595	hari		3.3955	hari		
				0.002						
				jam	0.142					
				hari	3.399 (g/m ² /hari)					

Emisi CO ₂						
Lokasi Pengamatan	Periode Pengamatan	g/m ² /hari		g/m ² /tahun	g/ha/tahun	ton/ha/tahun
PJ1 Pertanian Jagung	Pengamatan 1	8.46	7.92	2892.48	28924797.70	28.92
	Pengamatan 2	6.42				
	Pengamatan 3	8.89				
PJ2 Jagung	Pengamatan 1	6.81	6.67	2436.19	24361854.41	24.36
	Pengamatan 2	5.80				
	Pengamatan 3	7.41				
PK Pertanian Kebun Campuran	Pengamatan 1	4.39	4.42	1615.10	16151002.57	16.15
	Pengamatan 2	4.20				
	Pengamatan 3	4.68				
HP Hutan Tanaman Industri Pinus	Pengamatan 1	3.03	3.03	1104.24	11042431.68	11.04
	Pengamatan 2	2.86				
	Pengamatan 3	3.18				
HS Hutan Sekunder	Pengamatan 1	2.71	2.72	993.98	9939752.51	9.94
	Pengamatan 2	2.44				
	Pengamatan 3	3.01				
PC Pertanian Cengkeh	Pengamatan 1	3.63	3.81	1389.02	13890240.63	13.89
	Pengamatan 2	4.01				
	Pengamatan 3	3.77				
PH Pertanian Hortikultura	Pengamatan 1	7.04	6.85	2501.35	25013529.47	25.01
	Pengamatan 2	7.63				
	Pengamatan 3	5.89				
HPK Hutan Tanaman Industri Pinus campur Kopi	Pengamatan 1	3.01	3.49	1272.44	12724402.28	12.72
	Pengamatan 2	4.05				
	Pengamatan 3	3.40				

LAMPIRAN 3

Variabel Pengamatan Kondisi Iklim Mikro Lokasi Penelitian
Bulan Agustus-September 2022

Lokasi Pengamatan	Suhu Tanah (°C)			Kelembaban Tanah (%)			Suhu Udara (°C)			Kelembaban Udara (%)		
	Agustus	September	Oktober	Agustus	September	Oktober	Agustus	September	Oktober	Agustus	September	Oktober
PJ1	30	30	29	54.79	44.85	52.33	29.3	30.2	28.4	41.7	35.5	44.4
PJ2	28	30	29	82.00	71.86	89.77	29.8	31.5	28.6	45.4	33.5	41.6
PA	29	29	27	77.79	52.88	77.79	28.3	29.4	27.0	47.1	31.4	43.2
HP	25	26	24	48.19	42.29	53.23	26.4	26.8	25.3	66.4	54.7	68.3
HS	25	29	27	48.79	38.19	48.83	27.4	29.0	26.2	70.9	34.6	72.5
PC	21	22	20	61.07	49.00	64.34	23.1	24.3	22.0	61.8	59.6	75.7
PH	27	27	26	29.14	28.56	31.00	25.1	28.0	27.5	52.2	42.1	50.6
HPK	22	26	22	56.58	47.02	61.19	24.1	25.7	23.7	74.4	57.1	80.2

Sumber : Pengamatan Lapangan (2022)

LAMPIRAN 4

Curah Hujan Lokasi Penelitian (Agustus-Oktober 2022)

Date	Precipitation Corrected (mm/day)	Date	Precipitation Corrected (mm/day)	Date	Precipitation Corrected (mm/day)
01/08/2022	11.9	01/09/2022	0.91	01/10/2022	3.26
02/08/2022	3.97	02/09/2022	4.18	02/10/2022	8.38
03/08/2022	0.99	03/09/2022	4.62	03/10/2022	2.12
04/08/2022	0.88	04/09/2022	11.31	04/10/2022	8.34
05/08/2022	0.38	05/09/2022	3.54	05/10/2022	8.06
06/08/2022	0.17	06/09/2022	0.6	06/10/2022	4.5
07/08/2022	1	07/09/2022	0.3	07/10/2022	2.04
08/08/2022	10.33	08/09/2022	1.66	08/10/2022	5.62
09/08/2022	5.24	09/09/2022	1.03	09/10/2022	5.84
10/08/2022	9.27	10/09/2022	0.31	10/10/2022	1
11/08/2022	9.18	11/09/2022	0.35	11/10/2022	10.89
12/08/2022	6.13	12/09/2022	1.11	12/10/2022	32.21
13/08/2022	21.03	13/09/2022	2.45	13/10/2022	8.63
14/08/2022	6.66	14/09/2022	5.44	14/10/2022	8.43
15/08/2022	1.38	15/09/2022	0.87	15/10/2022	1.77
16/08/2022	0.56	16/09/2022	0.43	16/10/2022	7.17
17/08/2022	3.48	17/09/2022	0.46	17/10/2022	9.64
18/08/2022	2.83	18/09/2022	1.09	18/10/2022	74.44
19/08/2022	2.76	19/09/2022	3.72	19/10/2022	9.56
20/08/2022	1.91	20/09/2022	4.51	20/10/2022	2.07
21/08/2022	3.74	21/09/2022	5.18	21/10/2022	4.18
22/08/2022	2.66	22/09/2022	4.71	22/10/2022	1.73
23/08/2022	1.9	23/09/2022	0.64	23/10/2022	5.84
24/08/2022	3.35	24/09/2022	0.61	24/10/2022	23.3
25/08/2022	9.37	25/09/2022	0.24	25/10/2022	2.8
26/08/2022	3.83	26/09/2022	0.23	26/10/2022	14.95
27/08/2022	6.6	27/09/2022	0.09	27/10/2022	92.12
28/08/2022	1.03	28/09/2022	3.18	28/10/2022	7.07
29/08/2022	1.94	29/09/2022	9.65	29/10/2022	3.56
30/08/2022	10.05	30/09/2022	12.01	30/10/2022	6.72
31/08/2022	1.25			31/10/2022	7.75
Jumlah CH Bulanan	145.77	Jumlah CH Bulanan	85.43	Jumlah CH Bulanan	383.99

Sumber : NASA, Tahun 2022

LAMPIRAN 5

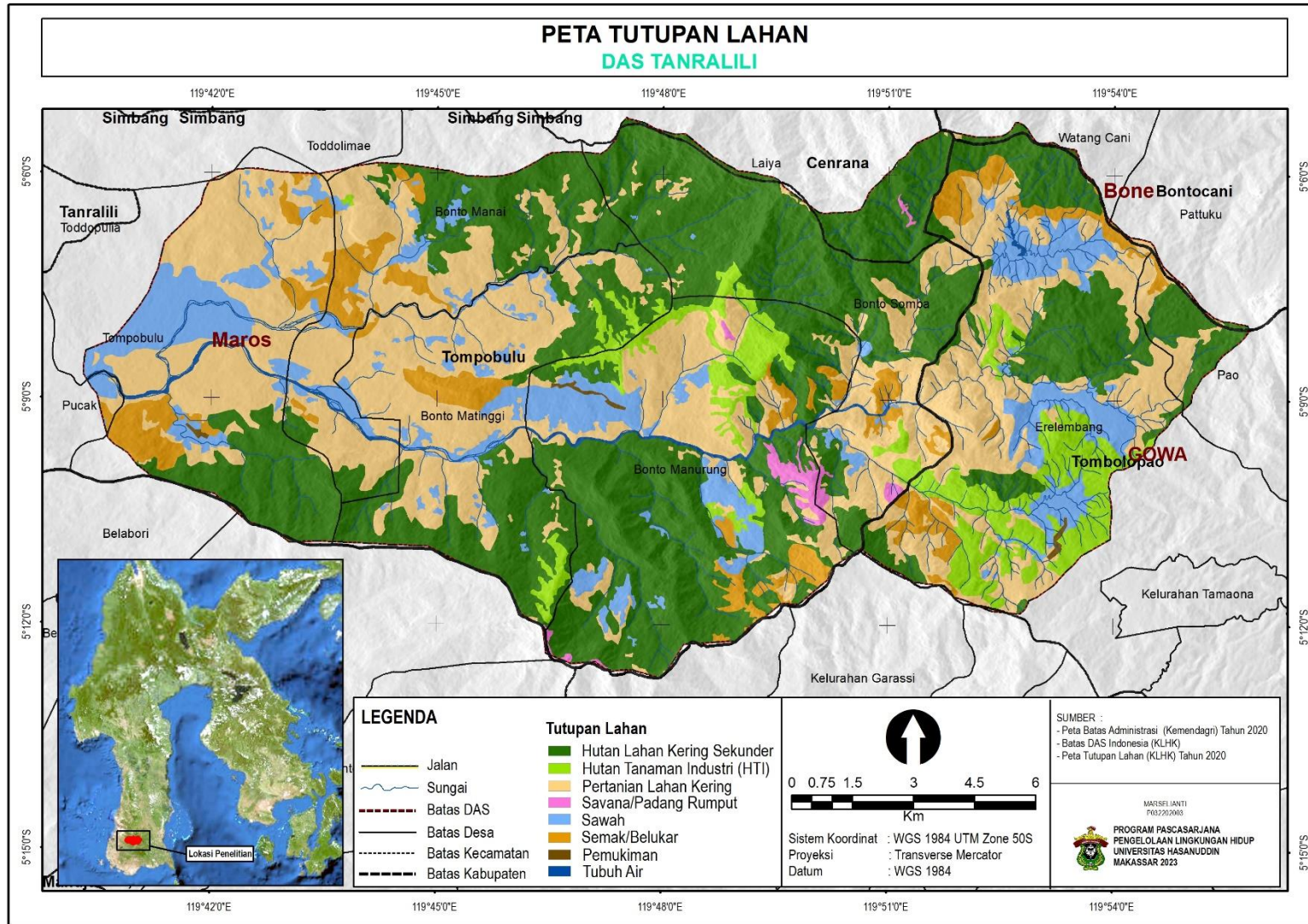
Hasil Wawancara Petani

Kode Lokasi	Penggunaan Lahan	Rotasi Tanaman dalam satu tahun	Teknik Pengolahan Lahan	Pengelolaan Serasah	Dosis Pupuk	Waktu Pemupukan
PJ1	Pertanian Lahan Kering Jagung	3 kali tanam jagung dalam satu tahun	Tanpa olah tanah	Batang dan daun digunakan untuk pakan ternak, 5 cm batang dikembalikan lagi ke dalam tanah di lahan	Urea : 100 kg NPK : 50 kg	Pupuk diaplikasikan pada umur tanaman 15 HST dan 30 HST
PJ2	Pertanian Lahan Kering Jagung	2 kali tanam jagung, 1 kali tanam padi	Tanpa olah tanah jika tanam jagung, jika ditanami padi dilakukan pembajakan	Batang dan daun digunakan untuk pakan ternak, 5 cm batang dikembalikan lagi ke dalam tanah di lahan, dan serasah padi digunakan untuk pakan ternak dan beberapa dibakar di lahan	Urea : 50 kg NPK : 25 kg	Pupuk diaplikasikan pada umur tanaman 15-20 HST dan 40-50 HST
PH	Pertanian Lahan Kering Hortikultura	3 kali tanam. Kubis, Sawi, tomat, lombok, dan daun bawang (jarang)	Lahan terus diolah dengan cara dicangkul dan dibajak untuk membuat bedengan setiap 1 musim tanaman	Serasah atau sisa tanaman digunakan sebagai pakan ternak dan sebagian dibakar dipinggir lahan	Pemupukan dilakukan pada setiap 10 are dengan dosis : Pupuk kandang : 200 kg Urea : 25 kg NPK : 25 kg	Pupuk kandang untuk persiapan lahan. Pupuk Urea dan NPK diaplikasikan pada umur tanaman 20 HST dan 45 HST. Dosis dan waktu pemupukan berlaku untuk semua jenis tanaman

					<p>Tanaman yang berbuah seperti tomat dan lombok disemprot insektida dan fungisida dengan dosis 60 ml per 1600 ml air.</p> <p>Tanaman sayuran disemprot pupuk kalsium dan boron dengan dosis 60 ml per 1600 ml air.</p>	<p>1 kali dalam seminggu, pada saat tanaman berbuah</p> <p>1 kali dalam seminggu, pada saat tanaman berumur 40 HST</p>
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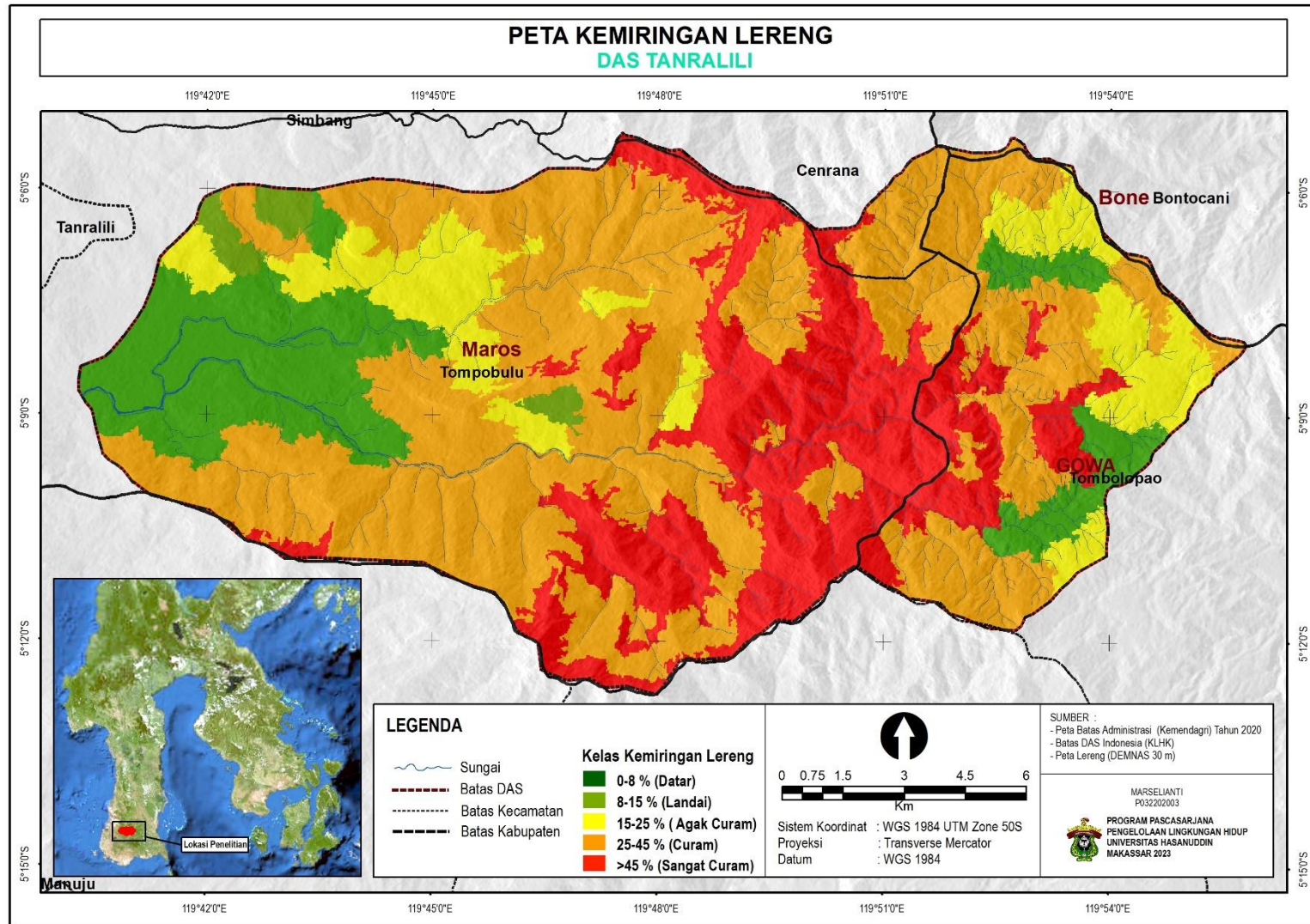
Sumber : Wawancara Lapangan (2022)

LAMPIRAN 6



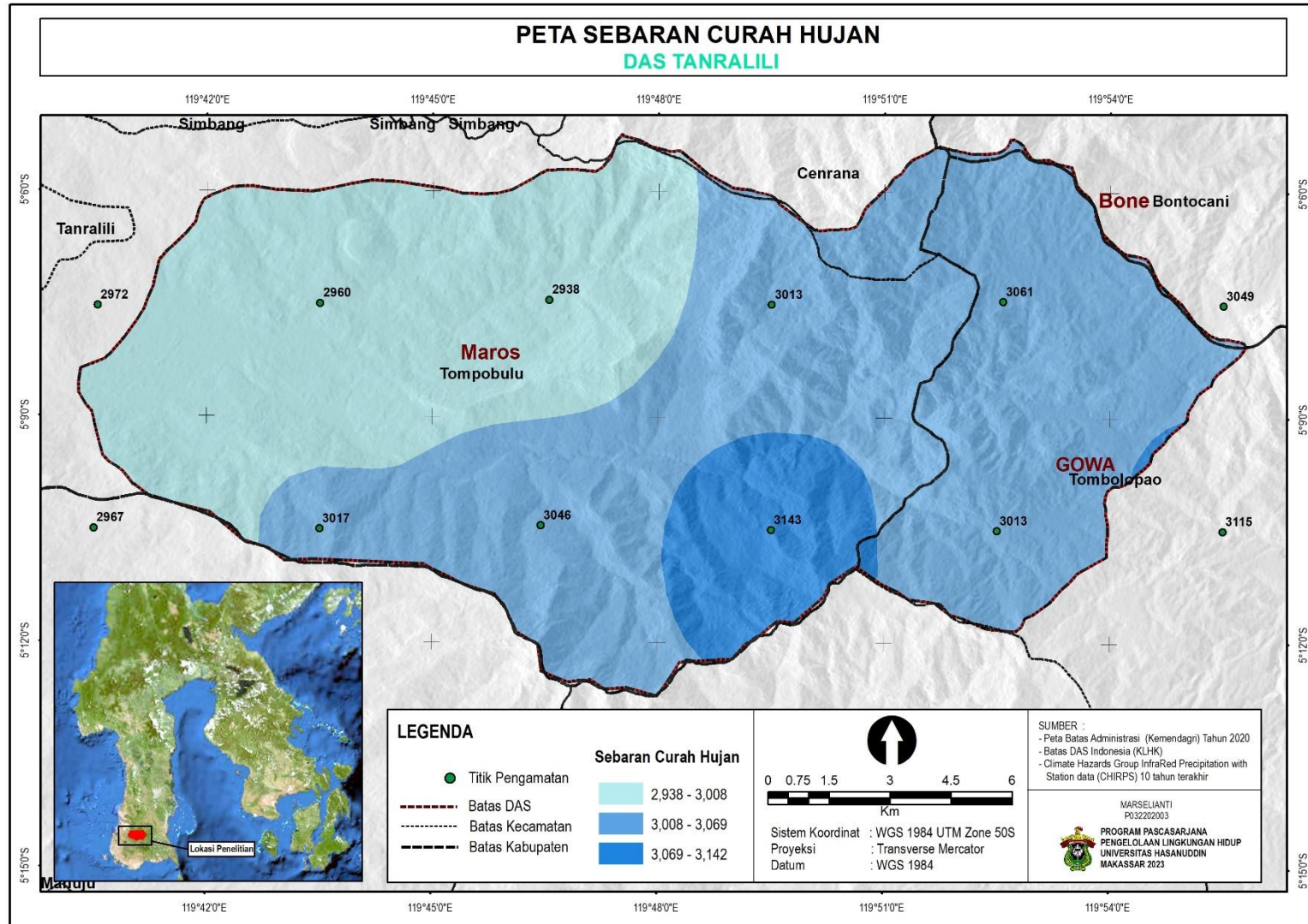
Peta Tutupan Lahan DAS Tanralili

LAMPIRAN 7



Peta Kemiringan Lereng DAS Tanralili

LAMPIRAN 8



Peta Sebaran Curah Hujan DAS Tanralili dalam 10 Tahun (2012-2021)

LAMPIRAN 9

Foto Lokasi Pengamatan



PJ1. Pertanian lahan kering dengan pemanfaatan lahan sebagai kebun kebun jagung (*zea mays*)



PJ2. Pertanian lahan kering dengan pemanfaatan lahan sebagai kebun kebun jagung (*zea mays*)



PA. Pertanian lahan kering dengan pemanfaatan lahan sebagai kebun campuran dengan vegetasi yang mendominasi diantaranya mangga dan jati



HP. Penggunaan lahan hutan tanaman industri bervegetasi pohon pinus



HS. Penggunaan lahan hutan kering sekunder. Hutan ini merupakan hutan campuran dengan berbagai vegetasi didalamnya



PC. Pertanian lahan kering dengan pemanfaatan lahan sebagai kebun cengkeh.



PH. Pertanian lahan kering dengan pemanfaatan lahan sebagai kebun hortikultura



HPK. Penggunaan lahan hutan tanaman Industri dengan vegetasi pinus dan kopi

LAMPIRAN 10

Foto Pengambilan Sampel Tanah



(a)



(b)

Pengambilan sampel tanah di lokasi Pertanian Jagung. (a) lokasi PJ1, (b) lokasi PJ2



(c)



(c)

Pengambilan sampel tanah di lokasi Hutan Tanaman Industri. (c) lokasi HP, (d) lokasi HPK



Pengambilan sampel tanah di Pertanian Hortikultura (Lokasi PH)



Pengambilan sampel tanah di Hutan Sekunder (Lokasi HS)

LAMPIRAN 11

Foto Pengambilan Sampel Gas



Pengambilan sampel udara di Lokasi PJ1



Pengambilan sampel udara di Lokasi PJ2



Pengambilan sampel udara di Lokasi HP



Pengambilan sampel udara di Lokasi HS



Pengambilan sampel udara di Lokasi PC



Pengambilan sampel udara di Lokasi PH



Pengambilan sampel udara di Lokasi HPK

LAMPIRAN 12

Foto Kegiatan Laboratorium



Analisis C-organik



Analisis Nitrogen



Analisis Respirasi Tanah



Analisis Tekstur Tanah



Pengovenan tanah