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Data Hasil Pengujian Tarik Perendaman 2,4,6 dan 8 minggu dan tanpa perendaman 0 minggu Komposit strip anyaman bambu petung 1,2 dan 3 ply.

0 MINGGU	L (mm)	ΔL (mm)	T (mm)	W (mm)	Ao (mm²)	P (N)	σ (N/mm²)	ε (%)	E (N/mm²)
T0_1L_01	90	1.07	3.10	12.60	39.06	1238.70	31.71	1.192%	3111.30
T0_1L_02	90	0.98	2.80	13.10	36.68	1194.70	32.57	1.083%	3276.25
T0_1L_03	90	1.51	3.60	12.85	46.26	2252.70	48.70	1.678%	3834.42
T0_2L_01	90	1.48	2.80	13.00	36.40	1541.00	42.34	1.644%	3592.38
T0_2L_02	90	1.34	2.90	12.90	37.41	1755.70	46.93	1.486%	4372.16
T0_2L_03	90	1.39	3.80	13.10	49.78	2242.90	45.06	1.549%	3821.64
T0_3L_01	90	1.92	3.90	13.00	50.70	3499.00	69.01	2.133%	3938.20
T0_3L_02	90	2.06	3.30	12.20	40.26	3394.00	84.30	2.287%	4772.03
T0_3L_03	90	1.31	3.50	13.30	46.55	2492.50	53.54	1.456%	4582.17



2 MINGGU	L (mm)	ΔL (mm)	T (mm)	W (mm)	Ao (mm²)	P (N)	σ (N/mm²)	ε (%)	E (N/mm²)
T10_1L_01	90	1.125	2.82	12.6	35.53	1177	33.13	1.250%	2809.935
T10_1L_02	90	1.567	3.4	12.8	43.52	1042.4	23.95	1.741%	1709.702
T10_1L_03	90	1.225	2.6	12.4	32.24	1271.9	39.45	1.361%	3454.889
T10_2L-01	90	2.117	3.6	13	46.80	2165	46.26	2.352%	2135.056
T10_2L-02	90	2.025	3.5	13.4	46.90	1831.6	39.05	2.250%	2283.278
T10_2L-03	90	2.235	3.4	13.1	44.54	2851	64.01	2.483%	2828.869
T10_3L_01	90	2.49	4.4	13.1	57.64	3744	64.95	2.767%	3199.786
T10_3L_02	90	3.196	4.2	13.4	56.28	4351	77.31	3.551%	1942.495
T10_3L_03	90	1.867	4.2	13	54.60	2488.1	45.57	2.074%	3074.695
T20_1L_01	90	1.88	3.00	13.00	39.00	1761.20	45.16	2.093%	2732.76
T20_1L_02	90	2.11	2.30	13.30	30.59	1239.50	40.52	2.347%	2533.75
T20_1L_03	90	1.55	3.50	13.70	47.95	2432.10	50.72	1.726%	2531.80
T20_2L_01	90	2.07	3.50	13.00	45.50	3164.00	69.54	2.304%	4014.92
T20_2L_02	90	1.78	3.80	13.30	50.54	2858.00	56.55	1.982%	3277.32
T20_2L_03	90	2.09	3.30	13.00	42.90	2321.20	54.11	2.319%	3370.34
T20_3L_01	90	2.15	4.30	13.00	55.90	3652.00	65.33	2.387%	3617.39
T20_3L_02	90	2.89	4.20	13.00	54.60	4371.00	80.05	3.209%	3343.51
T20_3L_03	90	2.37	4.30	13.20	56.76	4240.00	74.70	2.629%	3382.28
T30_1L_01	90	1.46	3.00	13.50	40.50	1788.80	44.17	1.617%	3261.23
T30_1L_02	90	1.67	3.10	13.20	40.92	1587.50	38.80	1.856%	2824.51
T30_1L_03	90	1.66	3.10	13.50	41.85	2425.00	57.95	1.839%	3543.50
T30_2L_01	90	1.78	3.90	13.30	51.87	2927.00	56.43	1.977%	3333.55
T30_2L_02	90	2.03	3.90	13.30	51.87	3238.00	62.43	2.259%	3467.57
T30_2L_03	90	1.78	4.00	13.30	53.20	2996.00	56.32	1.973%	3401.11
T30_3L_01	90	1.77	4.70	13.20	62.04	2637.00	42.50	1.966%	3131.912
T30_3L_02	90	2.27	4.90	13.00	63.70	4080.00	64.05	2.518%	2922.19
T30_3L_03	90	1.71	4.60	13.10	60.26	2585.00	42.90	1.899%	2705.33



4 MINGGU	L (mm)	ΔL (mm)	T (mm)	W (mm)	A_o (mm ²)	P (N)	σ (N/mm ²)	ϵ (%)	E (N/mm ²)
T10_1L_01	90	1.819	2.8	13.5	37.80	1804.8	47.75	2.021%	2833.506
T10_1L_02	90	2.118	3.3	14	46.20	2107.1	45.61	2.353%	2273.228
T10_1L_03	90	2.281	3.1	13.3	41.23	1703.2	41.31	2.534%	2063.299
T10_2L_01	90	3.267	3.7	13.5	49.95	2861	57.28	3.630%	1748.662
T10_2L_02	90	2.369	3.6	13.1	47.16	3035	64.36	2.632%	3115.396
T10_2L_03	90	2.064	3.3	12.5	41.25	2561	62.08	2.293%	1850.534
T10_3L_01	90	2.832	3.8	13.1	49.78	3223	64.74	3.147%	2129.008
T10_3L_02	90	3.973	4.1	13.1	53.71	4439	82.65	4.414%	1594.155
T10_3L_03	90	2.308	4.1	13.1	53.71	2556	47.59	2.564%	2812.722
T20_1L_01	90	1.80	4.60	13.10	60.26	1276.10	21.18	1.996%	1440.65
T20_1L_02	90	1.54	2.50	13.00	32.50	1173.00	36.09	1.711%	2629.00
T20_1L_03	90	1.54	2.50	13.00	32.50	1173.00	36.09	1.707%	2629.00
T20_2L_01	90	1.59	3.40	13.40	45.56	1426.80	31.32	1.771%	2703.87
T20_2L_02	90	2.74	3.30	13.40	44.22	3069.00	69.40	3.043%	2179.99
T20_2L_03	90	1.43	3.00	13.20	39.60	1165.00	29.42	1.591%	3232.16
T20_3L-01	90	3.06	4.60	13.10	60.26	3346.00	55.53	3.397%	1825.91
T20_3L-02	90	2.63	4.60	13.10	60.26	2358.70	39.14	2.918%	2016.27
T20_3L-03	90	2.56	4.60	13.00	59.80	2284.70	38.21	2.842%	2326.99
T30_1L_01	90	0.94	3.00	13.30	39.90	668.40	16.75	1.040%	2204.18
T30_1L_02	90	2.21	3.50	13.50	47.25	2180.90	46.16	2.457%	2128.37
T30_1L_03	90	1.21	2.90	13.00	37.70	998.10	26.47	1.341%	2261.45
T30_2L_01	90	2.70	3.10	13.20	40.92	2135.00	52.17	3.000%	2734.77
	90	2.80	3.20	13.10	41.92	2659.00	63.43	3.112%	2578.70
	90	3.81	3.00	13.10	39.30	4050.00	103.05	4.228%	1935.28
	90	1.84	4.30	13.20	56.76	1554.60	27.39	2.042%	3192.80
	90	2.30	3.30	13.30	43.89	2058.60	46.90	2.551%	2414.16
	90	3.32	4.50	13.10	58.95	3620.00	61.41	3.686%	2267.17



Optimization Software:
www.balesio.com

6 MINGGU	L (mm)	ΔL (mm)	T (mm)	W (mm)	Ao (mm ²)	P (N)	σ (N/mm ²)	ϵ (%)	E (N/mm ²)
T10_1L_01	90	2.929	3.1	12.6	39.06	1890.7	48.41	3.254%	2276.872
T10_1L_02	90	2.385	2.9	13	37.70	2306.9	61.19	2.650%	3134.995
T10_1L_03	90	2.302	2.4	12.6	30.24	1438.6	47.57	2.558%	3046.14
T10_2L_01	90	1.68	3.6	13.3	47.88	2454	51.25	1.867%	3388.106
T10_2L_02	90	2.016	2.9	13.3	38.57	2110.1	54.71	2.240%	3142.974
T10_2L_03	90	2.109	3	13.3	39.90	2301.9	57.69	2.343%	3441.648
T10_3L_01	90	2.465	4.3	13	55.90	3347	59.87	2.739%	2075.095
T10_3L_02	90	2.465	4.2	13	54.60	3347	61.30	2.739%	3075.095
T10_3L_03	90	3.206	4.3	13	55.90	4527	80.98	3.562%	2091.919
T20_1L_01	90	2.25	2.70	13.00	35.10	1468.60	41.84	2.500%	2765.58
T20_1L_02	90	2.25	2.70	13.00	35.10	1468.60	41.84	2.504%	2765.58
T20_1L_03	90	0.91	3.10	13.90	43.09	1112.50	25.82	1.013%	3114.65
T20_2L_01	90	2.42	3.40	12.20	41.48	2930.00	70.64	2.693%	3314.51
T20_2L_02	90	2.99	2.50	13.20	33.00	3329.00	100.88	3.318%	4191.21
T20_2L_03	90	1.74	3.60	12.90	46.44	2410.40	51.90	1.931%	3162.27
T20_3L_01	90	1.96	4.50	12.90	58.05	2886.00	49.72	2.182%	3683.11
T20_3L_02	90	2.34	4.50	13.50	60.75	3362.00	55.34	2.599%	3442.40
T20_3L_03	90	2.05	4.20	13.00	54.60	3393.00	62.14	2.279%	3533.33
T30_1L_01	90	1.69	2.50	13.20	33.00	1405.40	42.59	1.877%	2966.04
T30_1L_02	90	1.22	2.50	13.20	33.00	995.60	30.17	1.356%	3378.25
T30_1L_03	90	0.85	3.00	13.30	39.90	853.10	21.38	0.939%	3005.25
T30_2L_01	90	1.58	3.40	12.70	43.18	2124.40	49.20	1.750%	3459.94
	90	1.60	3.20	13.30	42.56	1865.80	43.84	1.772%	2858.03
	90	1.10	3.10	13.40	41.54	1379.00	33.20	1.223%	3838.61
	90	2.04	4.60	13.70	63.02	3195.00	50.70	2.263%	3128.73
	90	2.52	4.50	13.50	60.75	4421.00	72.77	2.802%	3426.40
	90	1.45	4.40	12.80	56.32	2268.00	40.27	1.616%	3133.67



Optimization Software:
www.balesio.com

8 MINGGU	L (mm)	ΔL (mm)	T (mm)	W (mm)	Ao (mm ²)	P (N)	σ (N/mm ²)	ϵ (%)	E (N/mm ²)
T10_1L_01	90	1.238	3.6	13.5	48.60	1407.7	28.97	1.376%	2327.372
T10_1L_02	90	2.046	3.7	13.3	49.21	2150.2	43.69	2.273%	2183.154
T10_1L_03	90	1.872	3.5	13.5	47.25	1887.8	39.95	2.080%	2510.786
T10_2L_01	90	1.031	3.7	13.2	48.84	1199.3	24.56	1.146%	3224.814
T10_2L_02	90	1.205	3.5	13.1	45.85	1501.8	32.75	1.339%	3437.008
T10_2L_03	90	1.961	3.2	13.3	42.56	2197.6	51.64	2.179%	3728.447
T10_3L_01	90	2.184	4.4	13.4	58.96	3221	54.63	2.427%	3472.262
T10_3L_02	90	2.001	4.6	13.3	61.18	3450	56.39	2.223%	3433.558
T10_3L_03	90	2.423	4.3	12.9	55.47	3633	65.49	2.692%	3240.317
T20_1L_01	90	1.50	4.20	12.50	52.50	1792.20	34.14	1.663%	2197.06
T20_1L_02	90	1.20	4.30	13.20	56.76	1832.00	32.28	1.334%	2571.65
T20_1L_03	90	1.50	4.20	12.50	52.50	1792.20	34.14	1.667%	2193.06
T20_2L_01	90	1.91	3.20	13.80	44.16	2642.00	59.83	2.124%	2914.18
T20_2L_02	90	1.33	3.50	14.00	49.00	2135.40	43.58	1.473%	3409.07
T20_2L_03	90	1.97	3.20	13.00	41.60	2454.40	59.00	2.190%	3510.20
T20_3L_01	90	1.92	4.50	12.60	56.70	3451.00	60.86	2.136%	3405.79
T20_3L_02	90	1.75	4.30	12.70	54.61	3290.00	60.25	1.947%	3425.08
T20_3L_03	90	2.04	4.30	13.20	56.76	3679.00	64.82	2.268%	3761.29
T30_1L_01	90	2.50	4.50	13.50	60.75	3168.00	52.15	2.773%	2438.40
T30_1L_02	90	1.17	3.20	12.90	41.28	1354.50	32.81	1.303%	2870.65
T30_1L_03	90	2.50	4.50	13.50	60.75	3168.00	52.15	2.778%	2438.40
T30_2L_01	90	0.95	3.30	12.70	41.91	1252.30	29.88	1.060%	3138.59
	90	1.91	3.00	13.40	40.20	2639.00	65.65	2.124%	3866.34
	90	2.21	3.30	12.90	42.57	3046.00	71.55	2.456%	3230.79
	90	1.85	3.20	12.30	39.36	2612.00	66.36	2.051%	3494.69
	90	1.92	4.70	12.90	60.63	2851.00	47.02	2.131%	2338.39
	90	1.85	3.20	12.30	39.36	2612.00	66.36	2.056%	3494.69



Data Hasil Pengujian Impak perendaman 2, 4, 6, dan 8 minggu dengan kadar 10% 20%, 30% dan Tanpa Perendaman 0 minggu Komposit strip anyaman bambu petung 1,2 dan 3 ply.

0 Minggu	Tenaga Patahan (Joule)	Kekuatan Impak (kJ/m ²)
I0-1L-01	0.2755	7.7309
I0-1L-02	0.2683	10.2783
I0-1L-03	0.2755	8.5462
I0-2L-01	0.4651	13.6792
I0-2L-02	0.4651	14.9069
I0-2L-03	0.5851	15.0595
I0-3L-01	0.6261	16.1026
I0-3L-02	0.5446	15.1057
I0-3L-03	0.5851	15.9330

2 Minggu	Tenaga Patahan (Joule)	Kekuatan Impak (kJ/m ²)
I10-1L-01	0.1681	5.3267
I10-1L-02	0.1334	3.9487
I10-1L-03	0.1681	5.3354
I10-2L-01	0.2755	7.8133
I10-2L-02	0.2392	7.7115
I10-2L-03	0.4261	15.1932
I10-3L-01	0.3877	13.8463
I10-3L-02	0.4651	16.3008
I10-3L-03	0.2755	8.6838
I20-1L-01	0.2755	7.9649
I20-1L-02	0.5446	15.0080
I20-1L-03	0.2755	7.4549
I20-2L-01	0.5851	15.9533
I20-2L-02	0.5446	15.1851
I20-2L-03	0.6261	17.4618
I20-3L-01	0.5046	13.9131
I20-3L-02	0.4261	11.8175
I20-3L-03	0.6261	18.2550
I30-1L-01	0.4651	11.1351



I30-1L-02	0.5851	12.6430
I30-1L-03	0.5046	11.0478
I30-2L-01	0.4261	9.6575
I30-2L-02	0.4261	10.7395
I30-2L-03	0.5851	13.2987
I30-3L-01	1.0175	24.4272
I30-3L-02	0.5851	14.4015
I30-3L-03	0.5851	13.8684

4 Minggu	Tenaga Patahan (Joule)	Kekuatan Impak (kJ/m ²)
I10-1L-01	0.3124	8.8907
I10-1L-02	0.3124	9.0848
I10-1L-03	0.3498	10.5912
I10-2L-01	0.3877	11.4108
I10-2L-02	0.2755	8.4491
I10-2L-03	0.2755	8.2157
I10-3L-01	0.3498	9.5575
I10-3L-02	0.3124	8.7757
I10-3L-03	0.2392	8.7787
I20-1L-01	0.7096	19.2107
I20-1L-02	0.5851	18.7317
I20-1L-03	0.5046	14.6976
I20-2L-01	0.3877	11.8216
I20-2L-02	0.3877	3.6407
I20-2L-03	0.5851	17.0255
I20-3L-01	0.2034	6.0050
I20-3L-02	0.5046	16.1187
I20-3L-03	0.3498	9.2034
I30-1L-01	0.5851	10.8346
I30-1L-02	0.7096	17.4552
I30-1L-03	0.7096	16.7564
I30-2L-01	0.5851	13.5469
I30-2L-02	0.5851	14.3921
I30-2L-03	0.6261	15.0514
I30-3L-01	0.6261	13.9786
I30-3L-02	0.6676	14.5991
I30-3L-03	0.6676	16.1932



6 Minggu	Tenaga Patahan (Joule)	Kekuatan Impak (kJ/m ²)
I10-1L-01	0.1681	4.2475
I10-1L-02	0.3124	7.6977
I10-1L-03	0.5046	12.6975
I10-2L-01	0.1681	5.0997
I10-2L-02	0.3498	8.3947
I10-2L-03	0.4261	9.6603
I10-3L-01	0.1334	3.5789
I10-3L-02	0.4261	12.2169
I10-3L-03	0.2755	7.6900
I20-1L-01	0.5446	13.2693
I20-1L-02	0.4261	11.1995
I20-1L-03	0.5046	15.1386
I20-2L-01	0.3877	10.9864
I20-2L-02	0.3498	9.9361
I20-2L-03	0.5046	13.2278
I20-3L-01	0.5046	14.3803
I20-3L-02	0.4261	12.3889
I20-3L-03	0.4261	12.4589
I30-1L-01	1.1098	27.7799
I30-1L-02	1.0634	26.4268
I30-1L-03	0.7521	18.3011
I30-2L-01	0.5851	16.5792
I30-2L-02	3.1303	17.7846
I30-2L-03	0.7096	18.6029
I30-3L-01	0.6261	17.8431
I30-3L-02	0.5851	17.0092
I30-3L-03	0.5446	15.9213
8 Minggu	Tenaga Patahan (Joule)	Kekuatan Impak (kJ/m ²)
I10-1L-01	0.3124	8.0185
I10-1L-02	0.2755	7.8134
I10-1L-03	0.2034	5.7781
I10-2L-01	0.5046	13.7899
I10-2L-02	0.4261	32.9724
I10-2L-03	0.4651	14.6508



I10-3L-01	0.4261	12.2711
I10-3L-02	0.1334	4.1188
I10-3L-03	0.2392	7.5873
I20-1L-01	0.3877	11.1448
I20-1L-02	0.6676	17.8662
I20-1L-03	0.5851	15.5115
I20-2L-01	0.5046	13.6600
I20-2L-02	0.4261	11.4157
I20-2L-03	0.2755	51.5446
I20-3L-01	0.5046	13.5949
I20-3L-02	0.3877	12.1388
I20-3L-03	0.5046	16.8277
I30-1L-01	0.6676	14.9531
I30-1L-02	0.6261	14.2213
I30-1L-03	0.4261	9.7267
I30-2L-01	0.6261	16.9493
I30-2L-02	0.6676	17.8839
I30-2L-03	0.5851	14.7802
I30-3L-01	0.8826	23.7808
I30-3L-02	1.0634	33.2947
I30-3L-03	0.7951	26.5178



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1. Pengambilan bahan penelitian bambu petung di toraja



2. Proses pengayaman bambu



3. Proses pengambilan serbuk baterai



4. Proses Perendaman pada volume box 40 liter (kadar baterai 10% ,20% ,30%)



5. Hari ke 10 sampai hari ke 11 muncul jamur putih terapung



6. Setelah dilakukan Perendaman dan dipotong sesuai ukuran panel 25 cm x 25 cm



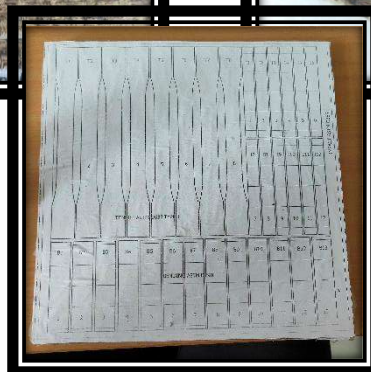
7. Resin yang digunakan Resin Epoxy dengan Perbandingan 60% resin dan 40 % resin



8. Proses Pembuatan komposit



9. Komposit Bambu Petung



10. Spesimen uji Tarik



11. Setelah pengujian Tarik



12. Spesimen uji impak

