

Cuadro 21. Datos estadísticos de C21 *S. reichenbachiana*.

C21 *S. reichenbachiana* (Coll) Pl#251195.3 Colombia (I)

#	Células del Haz (Adaxial Cells)			Células del Envés (Abaxial Cells)			Células Guardia (Guard Cells)			Células Subsidiarias (Subsidiary Cells)										
	Largo (L _h)	Ancho (A _h)	Area	Largo (L _e)	Ancho (A _e)	Area	Largo (L _g)	Ancho (A _g)	Area	Largo (L _s)	Ancho (A _s)	Area								
	Indice	μ_m	μ_m^2	Indice	μ_m	μ_m^2	Indice	μ_m	μ_m^2	Indice	μ_m	μ_m^2								
1	1.10	118.46	0.50	53.85	6378.70	0.60	64.62	0.56	60.31	3896.80	0.40	43.08	0.30	32.31	1391.72	0.60	64.62	0.40	43.08	2783.43
2	1.25	134.62	0.50	53.85	7248.52	0.86	92.62	0.46	49.54	4588.02	0.40	43.08	0.30	32.31	1391.72	0.45	48.46	0.30	32.31	1565.68
3	1.10	118.46	0.65	70.00	8292.31	0.70	75.38	0.52	56.00	4221.54	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.40	43.08	1855.62
4	0.90	96.92	0.55	59.23	5740.83	0.85	91.54	0.39	42.00	3844.61	0.40	43.08	0.30	32.31	1391.72	0.45	48.46	0.35	37.69	1826.63
5	0.90	96.92	0.50	53.85	5218.93	0.50	53.85	0.55	59.23	3189.35	0.40	43.08	0.30	32.31	1391.72	0.35	37.69	0.35	37.69	1420.71
6	1.10	118.46	0.55	59.23	7016.57	0.82	88.31	0.45	48.46	4279.33	0.40	43.08	0.40	43.08	1855.62	0.50	53.85	0.35	37.69	2029.59
7	1.00	107.69	0.50	53.85	5798.82	0.60	64.62	0.53	57.08	3688.05	0.35	37.69	0.30	32.31	1217.75	0.40	43.08	0.20	21.54	927.81
8	0.75	80.77	0.20	21.54	1739.64	0.80	86.15	0.36	38.77	3340.12	0.40	43.08	0.30	32.31	1391.72	0.35	37.69	0.15	16.15	608.88
9	1.10	118.46	0.60	64.62	7654.44	0.65	70.00	0.46	49.54	3467.69	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.20	21.54	1159.76
10	1.10	118.46	0.50	53.85	6378.70	0.50	53.85	0.42	45.23	2435.50	0.40	43.08	0.30	32.31	1391.72	0.45	48.46	0.25	26.92	1304.75
11	0.95	102.31	0.45	48.46	4957.99	0.60	64.62	0.50	53.85	3479.29	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.30	32.31	1391.72
12	0.95	102.31	0.55	59.23	6059.76	0.55	59.23	0.36	38.77	2296.33	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.20	21.54	927.81
13	1.10	118.46	0.55	59.23	7016.57	0.70	75.38	0.45	48.46	3653.25	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.25	26.92	1159.76
14	1.05	113.08	0.60	64.62	7306.51	0.55	59.23	0.55	59.23	3508.28	0.35	37.69	0.30	32.31	1217.75	0.35	37.69	0.20	21.54	811.83
15	0.90	96.92	0.60	64.62	6262.72	0.62	66.77	0.52	56.00	3739.08	0.30	32.31	0.30	32.31	1043.79	0.40	43.08	0.20	21.54	927.81
16	1.00	107.69	0.35	37.69	4059.17	0.62	66.77	0.52	56.00	3739.08	0.30	32.31	0.30	32.31	1043.79	0.30	32.31	0.25	26.92	869.82
17	0.95	102.31	0.35	37.69	3856.21	0.90	96.92	0.55	59.23	5740.83	0.35	37.69	0.30	32.31	1217.75	0.35	37.69	0.35	37.69	1420.71
18	1.00	107.69	0.40	43.08	4639.05	0.52	56.00	0.61	65.69	3678.77	0.40	43.08	0.30	32.31	1391.72	0.45	48.46	0.20	21.54	1043.79
19	0.80	86.15	0.35	37.69	3247.34	0.60	64.62	0.55	59.23	3827.22	0.35	37.69	0.35	37.69	1420.71	0.40	43.08	0.20	21.54	927.81
20	1.00	107.69	0.35	37.69	4059.17	0.75	80.77	0.45	48.46	3914.20	0.40	43.08	0.20	21.54	927.81	0.40	43.08	0.25	26.92	1159.76
21	1.30	140.00	0.40	43.08	6030.77	0.70	75.38	0.48	51.69	3896.80	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.30	32.31	1391.72
22	1.25	134.62	0.40	43.08	5798.82	0.61	65.69	0.58	62.46	4103.24	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.40	43.08	1855.62
23	0.95	102.31	0.55	59.23	6059.76	0.60	64.62	0.60	64.62	4175.15	0.35	37.69	0.30	32.31	1217.75	0.40	43.08	0.20	21.54	927.81
24	0.95	102.31	0.55	59.23	6059.76	0.55	59.23	0.52	56.00	3316.92	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.20	21.54	927.81
25	0.80	86.15	0.40	43.08	3711.24	0.65	70.00	0.55	59.23	4146.15	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.25	26.92	1159.76
Suma	2719.23			1281.54	140592.29		1766.15		1345.08	94165.81	9.55	1028.46	7.55	813.08	33430.17		1109.23		721.54	32386.39
Promedio	108.77			51.26	5623.69		70.65		53.80	3766.63	0.38	41.14	0.30	32.52	1397.31		44.37		28.86	1295.46
D.E. (σ)	14.91			11.54	1540.34		12.48		7.48	659.86	0.03	3.43	0.03	3.29	173.22		6.46		8.21	483.91

Promedio del área de las células del haz: 5623.69 micras cuadradas 177.82 células/mm cuadrados
 Promedio del área de las células del envés: 3766.63 micras cuadradas 265.49 células/mm cuadrados
 El promedio de las células del haz es 1.49 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.26 veces el promedio del envés.
 El promedio de las células subsidiarias es 1.54 veces el promedio del envés.

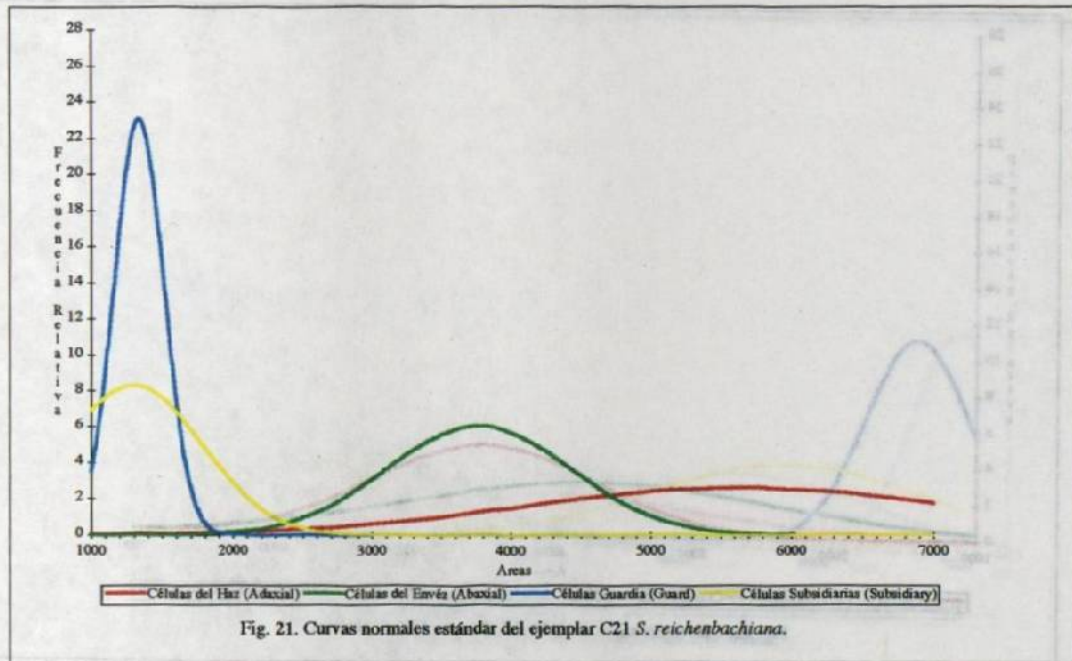


Fig. 21. Curvas normales estándar del ejemplar C21 *S. reichenbachiana*.

Cuadro 22. Datos estadísticos de *S. eburnea*.

C22 *S. eburnea* (= *granuliflora*) (Brd) H#290496-2 Brazil (I), Colombia, Las Gyanas, Venezuela, y Perú

#	Células del Haz (Adaxial Cells)				Células del Envés (Abaxial Cells)				Células Guardia (Guard Cells)				Células Subsidiarias (Subsidiary Cells)							
	Largo (Lh)		Ancho (Ah)		Largo (Le)		Ancho (Ae)		Largo (Lg)		Ancho (Ag)		Largo (Ls)		Ancho (As)		Area			
	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	μ_m			
1	1.30	140.00	0.39	42.00	5880.00	0.90	96.92	0.45	48.46	4697.04	0.40	43.08	0.40	43.08	1855.62	0.60	64.62	0.35	37.69	2435.50
2	0.75	80.77	0.45	48.46	3914.20	0.60	64.62	0.35	37.69	2435.50	0.30	32.31	0.25	26.92	869.82	0.35	37.69	0.35	37.69	1420.71
3	0.95	102.31	0.40	43.08	4407.10	0.80	86.15	0.50	53.85	4639.05	0.40	43.08	0.40	43.08	1855.62	0.50	53.85	0.60	64.62	3479.29
4	1.25	134.62	0.30	32.31	4349.11	0.80	86.15	0.25	26.92	2319.53	0.40	43.08	0.40	43.08	1855.62	0.50	53.85	0.25	26.92	1449.70
5	0.85	91.54	0.50	53.85	4928.99	0.65	70.00	0.55	59.23	4146.15	0.40	43.08	0.40	43.08	1855.62	0.45	48.46	0.40	43.08	2087.57
6	0.85	91.54	0.45	48.46	4436.09	0.55	59.23	0.35	37.69	2232.54	0.40	43.08	0.35	37.69	1623.67	0.50	53.85	0.80	86.15	4639.05
7	1.00	107.69	0.42	45.23	4871.01	0.95	102.31	0.40	43.08	4407.10	0.40	43.08	0.35	37.69	1623.67	0.45	48.46	0.60	64.62	3131.36
8	1.20	129.23	0.40	43.08	5566.86	0.60	64.62	0.55	59.23	3827.22	0.40	43.08	0.35	37.69	1623.67	0.60	64.62	0.40	43.08	2783.43
9	0.80	86.15	0.48	51.69	4453.49	0.80	86.15	0.40	43.08	3711.24	0.40	43.08	0.35	37.69	1623.67	0.40	43.08	0.50	53.85	2319.53
10	0.85	91.54	0.40	43.08	3943.19	0.75	80.77	0.35	37.69	3044.38	0.40	43.08	0.40	43.08	1855.62	0.45	48.46	0.35	37.69	1826.63
11	1.00	107.69	0.38	40.92	4407.10	0.65	70.00	0.45	48.46	3392.31	0.40	43.08	0.40	43.08	1855.62	0.50	53.85	0.40	43.08	2319.53
12	0.60	64.62	0.50	53.85	3479.29	1.10	118.46	0.60	64.62	7654.44	0.40	43.08	0.38	40.92	1762.84	0.50	53.85	0.75	80.77	4349.11
13	0.90	96.92	0.48	51.69	5010.18	0.50	53.85	0.45	48.46	2609.47	0.40	43.08	0.38	40.92	1762.84	0.55	59.23	0.40	43.08	2551.48
14	1.08	116.31	0.30	32.31	3757.63	0.55	59.23	0.50	53.85	3189.35	0.40	43.08	0.25	26.92	1159.76	0.40	43.08	0.20	21.54	927.81
15	1.00	107.69	0.48	51.69	5566.86	0.70	75.38	0.65	70.00	5276.92	0.40	43.08	0.25	26.92	1159.76	0.40	43.08	0.45	48.46	2087.57
16	0.85	91.54	0.40	43.08	3943.19	1.00	107.69	0.40	43.08	4639.05	0.30	32.31	0.30	32.31	1043.79	0.40	43.08	0.55	59.23	2551.48
17	0.75	80.77	0.50	53.85	4349.11	0.45	48.46	0.45	48.46	2348.52	0.30	32.31	0.30	32.31	1043.79	0.50	53.85	0.20	21.54	1159.76
18	1.05	113.08	0.42	45.23	5114.56	0.60	64.62	0.50	53.85	5479.29	0.30	32.31	0.30	32.31	1043.79	0.55	59.23	0.20	21.54	1275.74
19	0.75	80.77	0.40	43.08	3479.29	0.80	86.15	0.40	43.08	3711.24	0.30	32.31	0.30	32.31	1043.79	0.50	53.85	0.55	59.23	3189.35
20	0.60	64.62	0.48	51.69	3340.12	0.75	80.77	0.65	70.00	5653.85	0.30	32.31	0.30	32.31	1043.79	0.45	48.46	0.35	37.69	1826.63
21	1.00	107.69	0.50	53.85	5798.82	0.50	53.85	0.40	43.08	2319.53	0.30	32.31	0.30	32.31	1043.79	0.40	43.08	0.40	43.08	1855.62
22	0.70	75.38	0.50	53.85	4059.17	0.95	102.31	0.45	48.46	4957.99	0.30	32.31	0.30	32.31	1043.79	0.50	53.85	0.20	21.54	1159.76
23	0.70	75.38	0.40	43.08	3247.34	0.55	59.23	0.40	43.08	2551.48	0.30	32.31	0.30	32.31	1043.79	0.55	59.23	0.50	53.85	3189.35
24	1.10	118.46	0.45	48.46	5740.83	0.60	64.62	0.55	59.23	3827.22	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.30	32.31	1739.64
25	0.95	102.31	0.40	43.08	4407.10	0.45	48.46	0.40	43.08	2087.37	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.50	53.85	2899.41
Suma	2458.62		1160.92	112450.63		1890.00		1227.69	93157.97	9.10	980.00	8.31	894.92	35477.15		1292.31		1136.15	58655.02	
Promedio	98.34		46.44	4498.03		75.60		49.11	4776.33	0.36	39.20	0.33	35.80	1419.09		51.69		45.45	2346.20	
D.E. (σ)	20.33		6.22	794.55		19.38		10.46	1328.05	0.05	5.28	0.05	5.56	360.07		6.95		17.45	959.54	

Promedio del área de las células del haz: 4498.03 micras cuadradas 222.32 células/mm cuadradas
 Promedio del área de las células del envés: 3726.32 micras cuadradas 268.36 células/mm cuadrado
 El promedio de las células del haz es 1.21 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.10 veces el promedio del ancho.
 El promedio de las células subsidiarias es 1.14 veces el promedio del ancho.

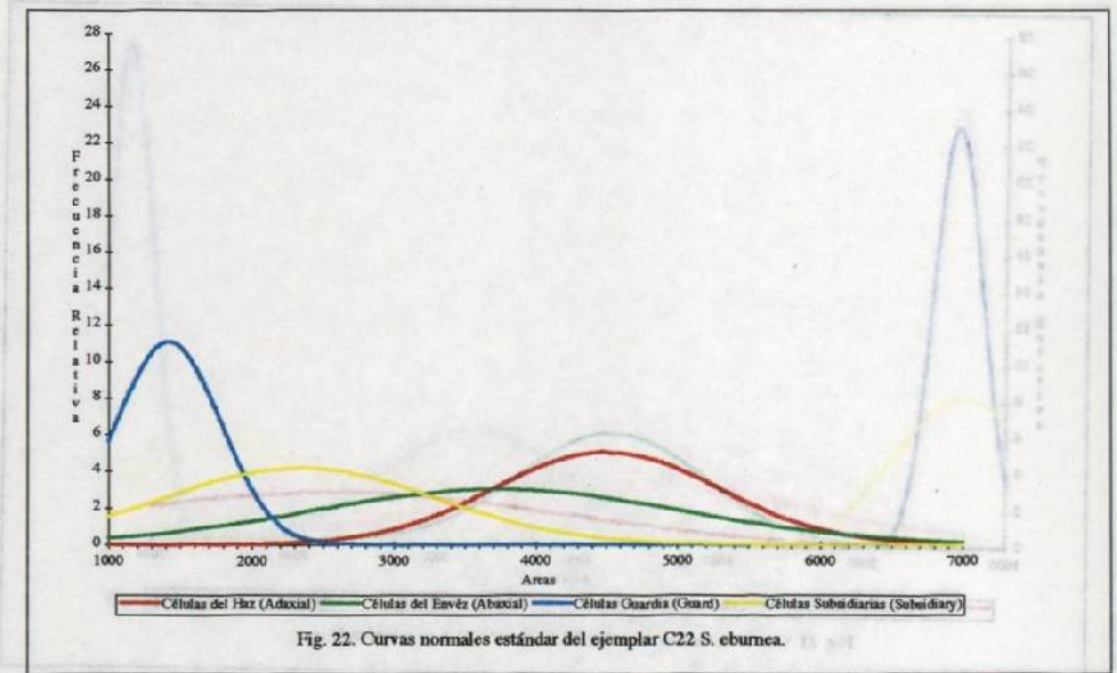


Fig. 22. Curvas normales estándar del ejemplar C22 *S. eburnea*.

Cuadro 23. Datos estadísticos de C23 *S. ecorruta*.

C23 *S. ecorruta* (Gtm) P1#290496-3 Costa Rica, y norte: El Salvador (?), Nicaragua, Honduras, y Guatemala (!)

#	Células del haz (Adaxial Cells)					Células del envés (Abaxial Cells)					Células Guardia (Guard Cells)					Células Subsidiarias (Subsidiary Cells)				
	Largo (Lh)		Ancho (Ah)		Área	Largo (Le)		Ancho (Ae)		Área	Largo (Lg)		Ancho (Ag)		Área	Largo (Ls)		Ancho (As)		Área
	Indice	μ_m	Indice	μ_m	μ_m	Indice	μ_m	Indice	μ_m	μ_m	Indice	μ_m	Indice	μ_m	μ_m	Indice	μ_m	Indice	μ_m	μ_m
1	0.70	75.38	0.50	53.85	4059.17	0.78	84.00	0.50	32.31	2713.85	0.40	43.08	0.25	26.92	1159.76	0.45	48.46	0.80	86.15	4175.15
2	0.50	53.85	0.45	48.46	2609.47	0.65	70.00	0.32	34.46	2412.31	0.38	40.92	0.32	34.46	1410.27	0.50	53.85	0.52	56.00	3015.38
3	0.50	53.85	0.50	53.85	2899.41	0.90	96.92	0.39	42.00	4070.77	0.35	37.69	0.30	32.31	1217.75	0.35	37.69	0.55	59.23	2232.54
4	0.91	98.00	0.49	52.77	5171.38	0.65	70.00	0.40	43.08	3015.38	0.40	43.08	0.30	32.31	1391.72	0.45	48.46	0.50	53.85	2609.47
5	0.70	75.38	0.48	51.69	3896.80	0.55	59.23	0.35	37.69	2232.54	0.40	43.08	0.35	37.69	1623.67	0.40	43.08	0.55	59.23	2551.48
6	0.70	75.38	0.48	51.69	3896.80	0.61	65.69	0.30	32.31	2122.37	0.35	37.69	0.30	32.31	1217.75	0.50	53.85	0.65	70.00	3769.23
7	1.05	113.08	0.50	53.85	6088.76	0.40	43.08	0.35	37.69	1623.67	0.40	43.08	0.35	37.69	1623.67	0.50	53.85	0.50	53.85	2899.41
8	0.71	76.46	0.55	59.23	4528.88	0.64	68.92	0.40	43.08	2968.99	0.40	43.08	0.30	32.31	1391.72	0.60	64.62	0.30	32.31	2087.57
9	0.84	90.46	0.42	45.23	4091.64	0.48	51.69	0.40	43.08	2226.75	0.30	32.31	0.25	26.92	869.82	0.40	43.08	0.40	43.08	1855.62
10	0.45	48.46	0.40	43.08	2087.57	0.70	75.38	0.30	32.31	2435.50	0.30	32.31	0.25	26.92	869.82	0.30	32.31	0.40	43.08	1391.72
11	1.00	107.69	0.75	80.77	8698.22	0.70	75.38	0.45	48.46	3633.25	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.25	26.92	1449.70
12	0.62	66.77	0.49	52.77	3523.36	0.50	53.85	0.42	45.23	2435.50	0.45	48.46	0.35	37.69	1826.63	0.55	59.23	0.30	32.31	1913.61
13	0.50	53.85	0.40	43.08	2319.53	0.40	43.08	0.40	43.08	1855.62	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.20	21.54	1159.76
14	0.46	49.54	0.40	43.08	2133.96	0.55	59.23	0.40	43.08	2551.48	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.55	59.23	3189.35
15	0.62	66.77	0.48	51.69	3451.46	0.60	64.62	0.30	32.31	2087.57	0.45	48.46	0.35	37.69	1826.63	0.45	48.46	0.25	26.92	1304.73
16	0.54	58.15	0.40	43.08	2505.09	0.50	53.85	0.40	43.08	2319.53	0.40	43.08	0.35	37.69	1623.67	0.45	48.46	0.25	26.92	1304.73
17	0.50	53.85	0.45	48.46	2609.47	0.64	68.92	0.40	43.08	2968.99	0.40	43.08	0.35	37.69	1623.67	0.55	59.23	0.30	32.31	1913.61
18	0.60	64.62	0.42	45.23	2922.60	0.35	37.69	0.32	34.46	1298.93	0.40	43.08	0.35	37.69	1623.67	0.45	48.46	0.20	21.54	1043.79
19	0.60	64.62	0.40	43.08	2783.43	0.80	86.15	0.40	43.08	3711.24	0.40	43.08	0.35	37.69	1623.67	0.55	59.23	0.20	21.54	1275.74
20	0.70	75.38	0.48	51.69	3896.80	0.55	59.23	0.40	43.08	2551.48	0.48	51.69	0.35	37.69	1948.40	0.50	53.85	0.25	26.92	1449.70
21	0.65	70.00	0.50	53.85	3769.23	0.92	99.08	0.42	45.23	4481.32	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.25	26.92	1449.70
22	0.60	64.62	0.48	51.69	3340.12	0.48	51.69	0.25	26.92	1391.72	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.35	37.69	1623.67
23	0.82	88.31	0.42	45.23	3994.22	0.70	75.38	0.45	48.46	3633.25	0.40	43.08	0.30	32.31	1391.72	0.45	48.46	0.30	32.31	1565.68
24	0.90	96.92	0.55	59.23	5740.83	0.65	70.00	0.42	45.23	3166.15	0.35	37.69	0.35	37.69	1420.71	0.50	53.85	0.40	43.08	2319.53
25	0.92	99.08	0.46	49.54	4908.12	0.50	53.85	0.45	48.46	2609.47	0.40	43.08	0.35	37.69	1623.67	0.40	43.08	0.45	48.46	2087.57
Suma	1840.46		1276.15	95926.33		1636.92		1011.23	66537.65	9.81	1056.46	7.92	832.92	36266.95		1260.00		1041.38	51638.45	
Promedio	73.62		51.05	3837.65		65.48		40.45	26062.31	0.39	42.26	0.32	34.12	1469.08		50.40		41.66	2065.54	
D.E. (e)	18.70		7.88	1475.60		15.74		5.99	801.96	0.04	4.28	0.03	3.70	261.26		7.27		16.99	831.96	

Promedio del área de las células del haz: 3837.05 micras cuadradas 260.62 células/mm cuadrados
 Promedio del área de las células del envés: 2662.31 micras cuadradas 375.61 células/mm cuadrados
 El promedio de las células del haz es 1.44 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.24 veces el promedio del ancho.
 El promedio de las células subsidiarias es 1.21 veces el promedio del ancho.

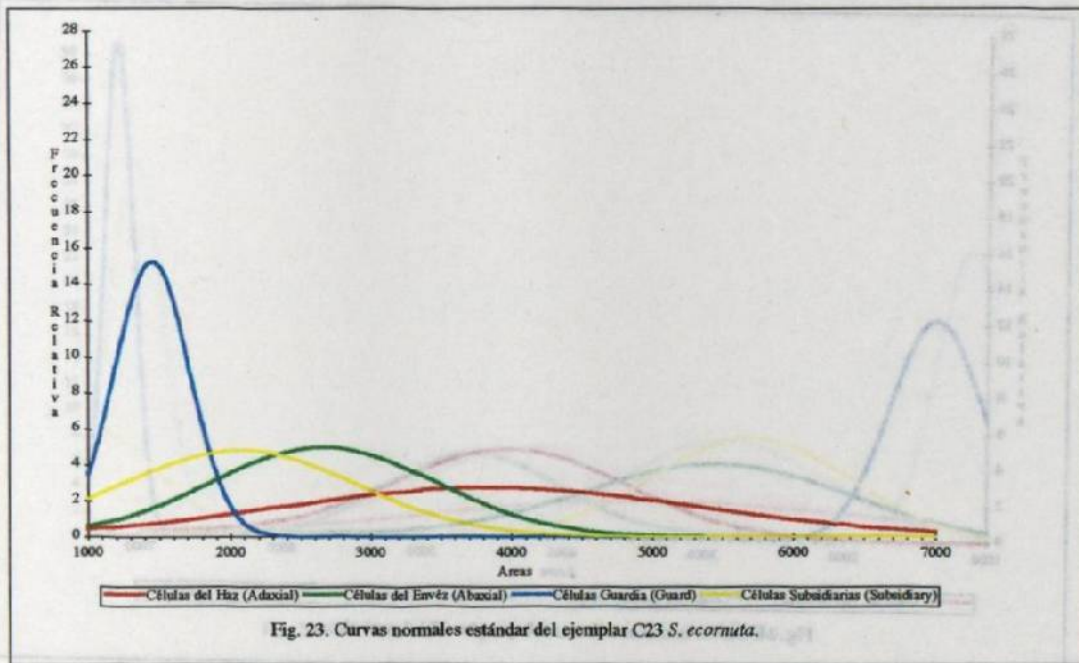


Fig. 23. Curvas normales estándar del ejemplar C23 *S. ecorruta*.

Cuadro 24. Datos estadísticos de C24 *S. jensischiana*.

C24 *S. jensischiana* (Coll) Pl#290496.6 Colombia (C), Venezuela, Ecuador, y Panamá

#	Células del Haz (Adaxial Cells)			Células del Envés (Abaxial Cells)			Células Guardia (Guard Cells)			Células Subsidiarias (Subsidiary Cells)										
	Largo (Lh)	Ancho (Ah)	Área	Largo (Le)	Ancho (Ae)	Área	Largo (Lg)	Ancho (Ag)	Área	Largo (Ls)	Ancho (As)	Área								
	Indice μm	Indice μm	μm^2	Indice μm	Indice μm	μm^2	Indice μm	Indice μm	μm^2	Indice μm	Indice μm	μm^2								
1	0.60	64.62	0.45	48.46	3131.36	0.65	70.00	0.45	48.46	3392.31	0.30	32.31	0.30	32.31	1043.79	0.60	64.62	0.55	59.23	3827.22
2	0.60	64.62	0.65	70.00	4523.08	0.40	43.08	0.40	43.08	1855.62	0.30	32.31	0.30	32.31	1043.79	0.45	48.46	0.52	56.00	2713.85
3	0.60	64.62	0.50	53.85	3479.29	0.40	43.08	0.40	43.08	1855.62	0.30	32.31	0.30	32.31	1043.79	0.30	32.31	0.52	56.00	1869.23
4	0.75	80.77	0.65	70.00	5653.85	0.40	43.08	0.40	43.08	1855.62	0.30	32.31	0.30	32.31	1043.79	0.55	59.23	0.50	53.85	3189.35
5	0.75	80.77	0.60	64.62	5218.93	0.50	53.85	0.40	43.08	2319.53	0.35	37.69	0.30	32.31	1217.75	0.40	43.08	0.55	59.23	2551.48
6	0.80	86.15	0.60	64.62	5566.86	0.80	86.15	0.55	59.23	5102.96	0.35	37.69	0.30	32.31	1217.75	0.50	53.85	0.50	53.85	2899.41
7	0.82	88.31	0.60	64.62	5706.03	0.60	64.62	0.45	48.46	4313.36	0.38	40.92	0.35	37.69	1542.48	0.50	53.85	0.40	43.08	2319.53
8	0.82	88.31	0.60	64.62	5706.03	0.55	59.23	0.45	48.46	2870.41	0.40	43.08	0.35	37.69	1623.67	0.45	48.46	0.40	43.08	2087.57
9	0.80	86.15	0.50	53.85	4639.05	0.85	91.54	0.50	53.85	4928.99	0.35	37.69	0.35	37.69	1420.71	0.60	64.62	0.60	64.62	4175.15
10	0.80	86.15	0.50	53.85	4639.05	0.70	75.38	0.40	43.08	3247.34	0.35	37.69	0.30	32.31	1217.75	0.40	43.08	0.50	53.85	2319.53
11	0.80	86.15	0.50	53.85	4639.05	0.65	70.00	0.30	32.31	2261.54	0.25	26.92	0.25	26.92	724.85	0.50	53.85	0.55	59.23	3189.35
12	0.70	75.38	0.50	53.85	4059.17	0.95	102.51	0.40	43.08	4407.10	0.40	43.08	0.30	32.31	1391.72	0.55	59.23	0.55	59.23	3508.28
13	0.70	75.38	0.50	53.85	4059.17	0.60	64.62	0.30	32.31	2087.57	0.35	37.69	0.35	37.69	1420.71	0.45	48.46	0.60	64.62	3131.36
14	0.60	64.62	0.50	53.85	3479.29	0.75	80.77	0.45	48.46	3914.20	0.45	48.46	0.40	43.08	2087.57	0.40	43.08	0.40	43.08	1855.62
15	0.75	80.77	0.45	48.46	3914.20	0.65	70.00	0.50	53.85	3769.23	0.40	43.08	0.35	37.69	1623.67	0.45	48.46	0.60	64.62	3131.36
16	0.72	77.54	0.50	53.85	4175.15	0.60	64.62	0.35	37.69	2435.50	0.40	43.08	0.35	37.69	1623.67	0.40	43.08	0.50	53.85	2319.53
17	0.65	70.00	0.50	53.85	3769.23	0.50	53.85	0.45	48.46	2609.47	0.30	32.31	0.25	26.92	869.82	0.35	37.69	0.50	53.85	2029.59
18	0.60	64.62	0.45	48.46	3131.36	0.60	64.62	0.50	53.85	3479.29	0.35	37.69	0.35	37.69	1420.71	0.35	37.69	0.55	59.23	3508.28
19	0.65	70.00	0.45	48.46	3392.31	0.55	59.23	0.45	48.46	2870.41	0.35	37.69	0.35	37.69	1420.71	0.45	48.46	0.50	53.85	2609.47
20	0.60	64.62	0.55	59.23	3827.22	0.70	75.38	0.35	37.69	2841.42	0.35	37.69	0.35	37.69	1420.71	0.40	43.08	0.40	43.08	1855.62
21	0.80	86.15	0.55	59.23	5102.96	0.45	48.46	0.45	48.46	2348.52	0.45	48.46	0.32	34.46	1670.06	0.50	53.85	0.50	53.85	2899.41
22	0.60	64.62	0.50	53.85	3479.29	0.60	64.62	0.45	48.46	3131.36	0.45	48.46	0.35	37.69	1826.63	0.35	37.69	0.50	53.85	2029.59
23	0.80	86.15	0.45	48.46	4175.15	0.45	48.46	0.40	43.08	2087.57	0.35	37.69	0.30	32.31	1217.75	0.50	53.85	0.45	48.46	2609.47
24	0.80	86.15	0.50	53.85	4639.05	0.45	48.46	0.35	37.69	1826.63	0.30	32.31	0.30	32.31	1043.79	0.40	43.08	0.25	26.92	1159.76
25	0.80	86.15	0.55	59.23	5102.96	0.40	43.08	0.40	43.08	1855.62	0.45	48.46	0.35	37.69	1826.63	0.50	53.85	0.45	48.46	2609.47
Suma	1928.77	1410.77	109209.10	1588.46	1130.77	72485.20	8.98	967.08	8.07	869.08	34004.26	1238.46	1328.92	66338.45						
Promedio	77.15	56.43	4368.36	63.54	45.23	2899.41	0.36	38.68	0.32	34.76	1360.17	49.54	53.16	2653.54						
D.E. (σ)	9.45	6.62	824.01	15.93	6.59	957.87	0.06	5.97	0.04	3.80	325.76	8.37	8.51	706.42						

Promedio del área de las células del haz: 4368.36 micras cuadradas 228.92 células/mm cuadrados
 Promedio del área de las células del envés: 2899.41 micras cuadradas 344.90 células/mm cuadrados
 El promedio de las células del haz es 1.51 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.11 veces el promedio del ancho.
 El promedio de las células subsidiarias es 0.93 veces el promedio del ancho.

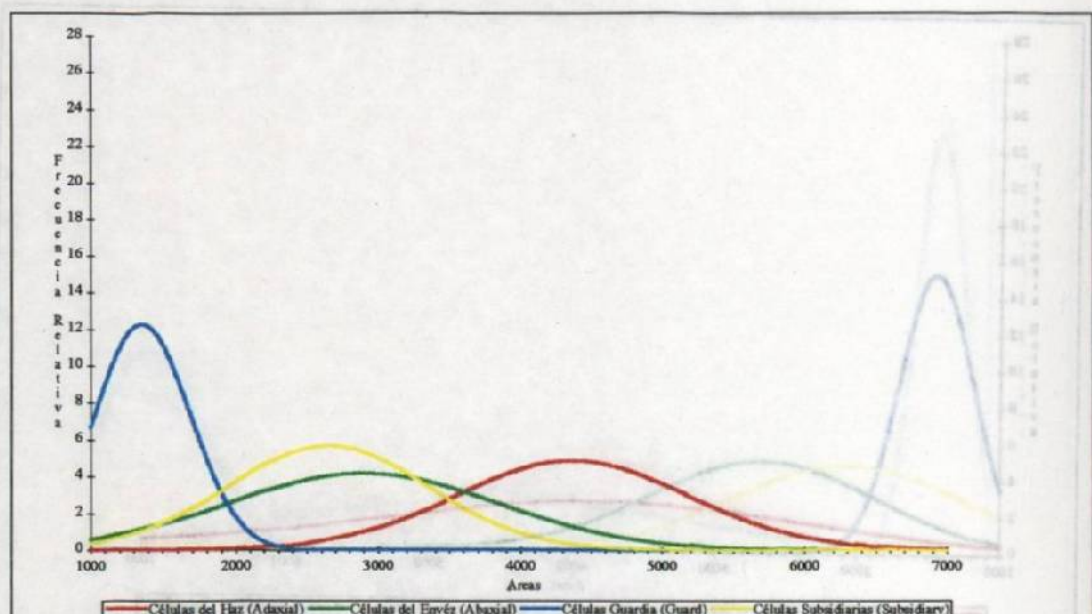


Fig. 24. Curvas normales estándar del ejemplar C24 *S. jensischiana*.

Cuadro 25. Datos estadísticos de C25 *S. grandiflora*.

C25 *S. grandiflora* (Br1) P1#290496-1 Colombia, Venezuela, Brasil (1), Ecuador y Perú

#	Células del Haz (Adaxial Cella)						Células del Envés (Abaxial Cells)						Células Guardia (Guard Cells)						Células Subsidiarias (Subsidiary Cells)					
	Largo (lb)		Ancho (Ab)		Área		Largo (Lc)		Ancho (Ac)		Área		Largo (Lg)		Ancho (Ag)		Área		Largo (La)		Ancho (As)		Área	
	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m
1	1.30	140.00	0.42	45.23	6332.31	0.95	102.31	0.30	32.31	3305.32	0.36	38.77	0.30	32.31	1252.54	0.50	53.85	0.25	26.92	1449.70				
2	1.15	123.85	0.45	48.46	6001.77	0.85	91.54	0.38	40.92	3746.03	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.35	37.69	2029.59				
3	0.94	101.23	0.45	48.46	4905.80	0.90	96.92	0.32	34.46	3340.12	0.32	34.46	0.30	32.31	1113.37	0.50	53.85	0.40	43.08	2319.53				
4	1.30	140.00	0.50	53.85	7338.46	0.86	92.62	0.42	45.23	4189.06	0.30	32.31	0.30	32.31	1043.79	0.40	43.08	0.18	19.38	835.03				
5	0.70	75.38	0.40	43.08	3247.34	0.70	75.38	0.45	48.46	3653.25	0.35	37.69	0.30	32.31	1217.75	0.40	43.08	0.15	16.15	695.86				
6	0.90	96.92	0.50	53.85	5218.93	0.85	91.54	0.45	48.46	4436.09	0.35	37.69	0.30	32.31	1217.75	0.32	34.46	0.22	23.69	816.47				
7	0.82	88.31	0.50	53.85	4755.03	0.90	96.92	0.45	48.46	4697.04	0.35	37.69	0.30	32.31	1217.75	0.42	45.23	0.20	21.54	974.20				
8	1.00	107.69	0.58	62.46	6726.63	0.75	80.77	0.40	43.08	3479.29	0.35	37.69	0.30	32.31	1217.75	0.35	37.69	0.15	16.15	608.88				
9	1.10	118.46	0.50	53.85	6378.70	0.75	80.77	0.40	43.08	3479.29	0.30	32.31	0.30	32.31	1043.79	0.35	37.69	0.10	10.77	405.92				
10	0.65	70.00	0.50	53.85	3769.23	0.80	86.15	0.42	45.23	3896.80	0.35	37.69	0.30	32.31	1217.75	0.30	32.31	0.20	21.54	695.86				
11	0.95	102.31	0.60	64.62	6610.65	0.75	80.77	0.40	43.08	3479.29	0.35	37.69	0.30	32.31	1217.75	0.30	32.31	0.20	21.54	695.86				
12	1.00	107.69	0.58	62.46	6726.63	1.00	107.69	0.45	48.46	5218.93	0.35	37.69	0.30	32.31	1217.75	0.50	53.85	0.15	16.15	869.82				
13	0.80	86.15	0.50	53.85	4639.05	0.75	80.77	0.38	40.92	3305.32	0.35	37.69	0.35	37.69	1420.71	0.50	53.85	0.15	16.15	869.82				
14	0.80	86.15	0.52	56.00	4824.61	0.85	91.54	0.40	43.08	3943.19	0.35	37.69	0.30	32.31	1217.75	0.38	40.92	0.15	16.15	661.06				
15	0.90	96.92	0.55	59.23	5740.83	0.96	103.38	0.45	48.46	5010.18	0.35	37.69	0.30	32.31	1217.75	0.38	40.92	0.15	16.15	661.06				
16	1.00	107.69	0.55	59.23	6378.70	0.82	88.31	0.35	37.69	3328.52	0.35	37.69	0.30	32.31	1217.75	0.50	53.85	0.20	21.54	1159.76				
17	0.58	62.46	0.42	45.23	2825.18	0.85	91.54	0.40	43.08	3943.19	0.30	32.31	0.30	32.31	1043.79	0.50	53.85	0.10	10.77	579.88				
18	0.68	73.23	0.45	48.46	3548.88	0.65	70.00	0.45	48.46	3392.31	0.40	43.08	0.30	32.31	1391.72	0.42	45.23	0.20	21.54	974.20				
19	0.88	94.77	0.40	43.08	4082.37	0.60	64.62	0.40	43.08	2783.43	0.38	40.92	0.28	30.15	1233.99	0.42	45.23	0.20	21.54	974.20				
20	0.60	64.62	0.40	43.08	2783.43	0.72	77.54	0.40	43.08	3340.12	0.35	37.69	0.30	32.31	1217.75	0.40	43.08	0.20	21.54	927.81				
21	0.90	96.92	0.48	51.69	5010.18	0.70	75.38	0.45	48.46	3653.25	0.40	43.08	0.28	30.15	1298.99	0.38	40.92	0.20	21.54	881.42				
22	0.60	64.62	0.42	45.23	2922.60	0.91	98.00	0.38	40.92	4010.46	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.20	21.54	1159.76				
23	0.75	80.77	0.35	37.69	3044.38	0.65	70.00	0.40	43.08	3015.38	0.35	37.69	0.30	32.31	1217.75	0.40	43.08	0.30	32.31	1391.72				
24	0.72	77.54	0.35	37.69	2922.60	0.64	68.92	0.40	43.08	2968.99	0.32	34.46	0.30	32.31	1113.37	0.48	51.69	0.32	34.46	1781.40				
25	0.75	80.77	0.40	43.08	3479.29	0.70	75.38	0.40	43.08	3247.34	0.35	37.69	0.30	32.31	1217.75	0.40	43.08	0.15	16.15	695.86				
Suma	2344.46		1267.54	120413.57		2138.77		1087.69	92862.24	8.78	945.54	7.51	808.77	30570.20		1130.77		546.00	25114.67					
Promedio	93.78		50.70	4816.54		85.55		43.51	3714.49	0.35	37.82	0.30	32.35	1232.80		45.23		21.84	1004.59					
D.E. (σ)	21.68		7.58	1493.20		11.85		4.29	614.10	0.03	3.13	0.01	1.26	102.47		7.30		7.85	466.20					

Promedio del área de las células del haz: 4816.54 micras cuadradas 207.62 células/mm cuadradas
 Promedio del área de las células del envés: 3714.49 micras cuadradas 269.22 células/mm cuadradas
 El promedio de las células del haz es 1.30 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.17 veces el promedio del ancho.
 El promedio de las células subsidiarias es 2.07 veces el promedio del ancho.

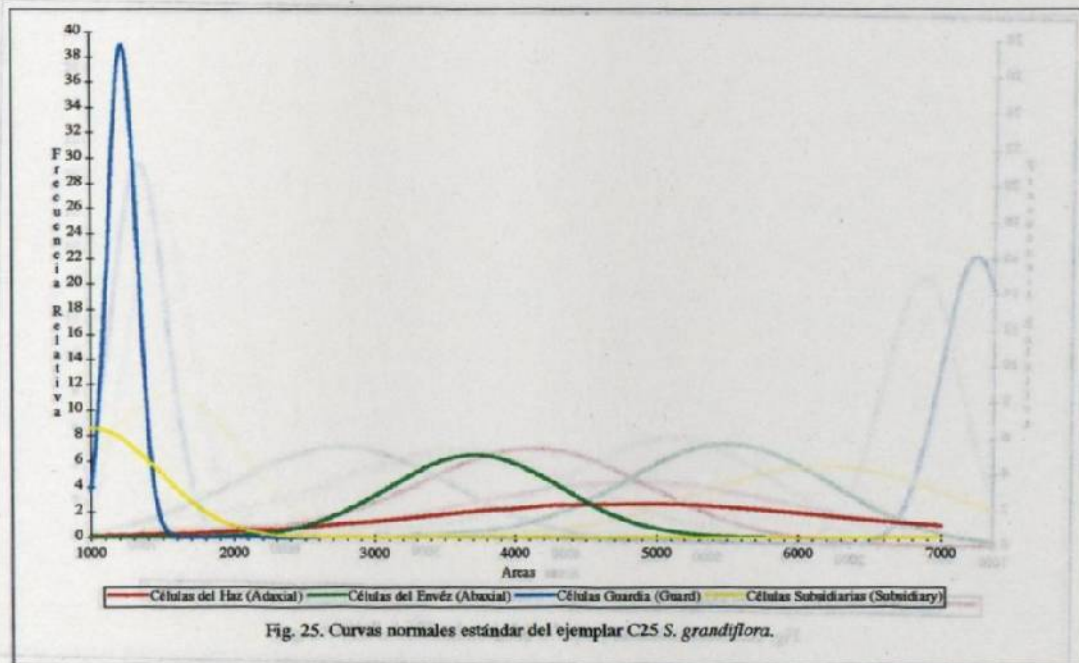


Fig. 25. Curvas normales estándar del ejemplar C25 *S. grandiflora*.

Cuadro 26. Datos estadísticos de C26 *S. tigrina*.

C26 *S. tigrina* Pl#290496-9 Colombia y norte incl. México (nota: i.d. como *S. tigrina* 10 jul 96)

#	Células del Haz (Adaxial cells)				Células del Envés (Abaxial Cells)				Células Guardia (Guard Cells)				Células Subsidiarias (Subsidiary Cells)							
	Largo (Lh)		Ancho (Ah)		Largo (Le)		Ancho (Ae)		Largo (Lg)		Ancho (Ag)		Largo (La)		Ancho (Aa)					
	Indice	μm	Indice	μm	Indice	μm	Indice	μm	Indice	μm	Indice	μm	Indice	μm	Indice	μm				
1	0.70	75.38	0.50	53.85	4059.17	0.75	80.77	0.40	43.08	3479.29	0.40	43.08	0.30	32.31	1391.72	0.45	48.46	0.20	21.54	1043.79
2	0.53	57.08	0.40	43.08	2458.70	0.52	56.00	0.40	43.08	2412.31	0.38	40.92	0.30	32.31	1322.13	0.50	53.85	0.35	37.69	2029.59
3	0.71	76.46	0.45	48.46	3705.44	0.85	91.54	0.40	43.08	3943.19	0.30	32.31	0.28	30.15	974.20	0.50	53.85	0.28	30.15	1623.67
4	0.70	75.38	0.45	48.46	3653.25	0.55	59.23	0.50	53.85	3189.35	0.30	32.31	0.30	32.31	1043.79	0.50	53.85	0.25	26.92	1449.70
5	0.80	86.15	0.40	43.08	3711.24	0.60	64.62	0.40	43.08	2783.43	0.38	40.92	0.30	32.31	1322.13	0.42	45.23	0.42	45.23	2045.82
6	0.71	76.46	0.55	59.23	4528.88	0.65	70.00	0.50	53.85	3769.23	0.30	32.31	0.25	26.92	869.82	0.42	45.23	0.50	53.85	2435.50
7	0.65	70.00	0.45	48.46	3392.31	0.64	68.92	0.54	58.15	4008.14	0.30	32.31	0.20	21.54	695.86	0.48	51.69	0.45	48.46	2505.09
8	0.70	75.38	0.55	59.23	4465.09	0.55	59.23	0.45	48.46	2870.41	0.30	32.31	0.30	32.31	1043.79	0.48	51.69	0.22	23.69	1224.71
9	0.88	94.77	0.50	53.85	5102.96	0.50	53.85	0.50	53.85	2899.41	0.40	43.08	0.30	32.31	1391.72	0.48	51.69	0.20	21.54	1113.37
10	0.85	91.54	0.46	49.54	4534.67	0.45	48.46	0.40	43.08	2087.57	0.30	32.31	0.30	32.31	1043.79	0.42	45.23	0.30	32.31	1461.30
11	0.89	95.85	0.48	51.69	4954.51	0.50	53.85	0.45	48.46	2609.47	0.30	32.31	0.20	21.54	695.86	0.50	53.85	0.45	48.46	2609.47
12	0.88	94.77	0.44	47.38	4490.60	0.55	59.23	0.52	56.00	3316.92	0.40	43.08	0.30	32.31	1391.72	0.55	59.23	0.40	43.08	2551.48
13	0.75	80.77	0.60	64.62	5218.93	0.50	53.85	0.40	43.08	2319.53	0.38	40.92	0.30	32.31	1322.13	0.75	80.77	0.45	48.46	3914.20
14	0.67	72.15	0.50	53.85	3885.21	0.65	70.00	0.48	51.69	3618.46	0.42	45.23	0.30	32.31	1461.30	0.40	43.08	0.30	32.31	1391.72
15	0.56	60.31	0.58	62.46	3766.91	0.65	70.00	0.35	37.69	2638.46	0.38	40.92	0.25	26.92	1101.77	0.48	51.69	0.20	21.54	1113.37
16	0.76	81.85	0.60	64.62	5288.52	0.55	59.23	0.42	45.23	2679.05	0.35	37.69	0.28	30.15	1136.57	0.55	59.23	0.50	53.85	3189.35
17	0.71	76.46	0.45	48.46	3705.44	0.68	73.23	0.42	45.23	3312.28	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.35	37.69	1623.67
18	0.78	84.00	0.55	59.23	4975.38	0.40	43.08	0.48	51.69	2226.75	0.35	37.69	0.35	37.69	1420.71	0.40	43.08	0.35	37.69	1623.67
19	0.73	78.62	0.55	59.23	4656.45	0.75	80.77	0.51	54.92	4436.09	0.35	37.69	0.30	32.31	1217.75	0.30	32.31	0.10	10.77	347.93
20	0.90	96.92	0.43	46.31	4488.28	0.60	64.62	0.38	40.92	2644.26	0.35	37.69	0.28	30.15	1136.57	0.50	53.85	0.50	53.85	2899.41
21	0.96	103.38	0.50	53.85	5566.86	0.39	42.00	0.39	42.00	1764.00	0.25	26.92	0.20	21.54	579.88	0.55	59.23	0.50	53.85	3189.35
22	0.52	56.00	0.48	51.69	2894.77	0.40	43.08	0.35	37.69	1623.67	0.40	43.08	0.25	26.92	1159.76	0.55	59.23	0.50	53.85	3189.35
23	0.69	74.31	0.62	66.77	4961.47	0.52	56.00	0.39	42.00	2352.00	0.35	37.69	0.25	26.92	1014.79	0.55	59.23	0.55	59.23	3508.28
24	0.65	70.00	0.54	58.15	4070.77	0.48	51.69	0.35	37.69	1948.40	0.35	37.69	0.30	32.31	1217.75	0.50	53.85	0.50	53.85	2899.41
25	0.57	61.38	0.45	48.46	2974.79	0.52	56.00	0.41	44.15	2472.62	0.30	32.31	0.25	26.92	869.82	0.52	56.00	0.50	53.85	3015.38
Suma	1965.38		1344.00	105510.61		1529.23		1162.00	71404.30	8.69	935.85	6.94	747.38	28217.04		1308.46		1003.69	53998.57	
Promedio	78.62		53.76	4226.43		61.17		46.48	2896.18	0.35	37.43	0.28	29.90	1126.68		52.34		40.15	2159.94	
D.E. (σ)	12.74		6.80	805.00		12.39		6.14	734.29	0.05	4.96	0.04	4.03	247.57		8.90		13.71	924.67	

Promedio del área de las células del haz: 4220.42 micras cuadradas 236.94 células/mm cuadrados
 Promedio del área de las células del envés: 2856.17 micras cuadradas 350.12 células/mm cuadrados
 El promedio de las células del haz es 1.48 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.25 veces el promedio del ancho.
 El promedio de las células subsidiarias es 1.30 veces el promedio del ancho.

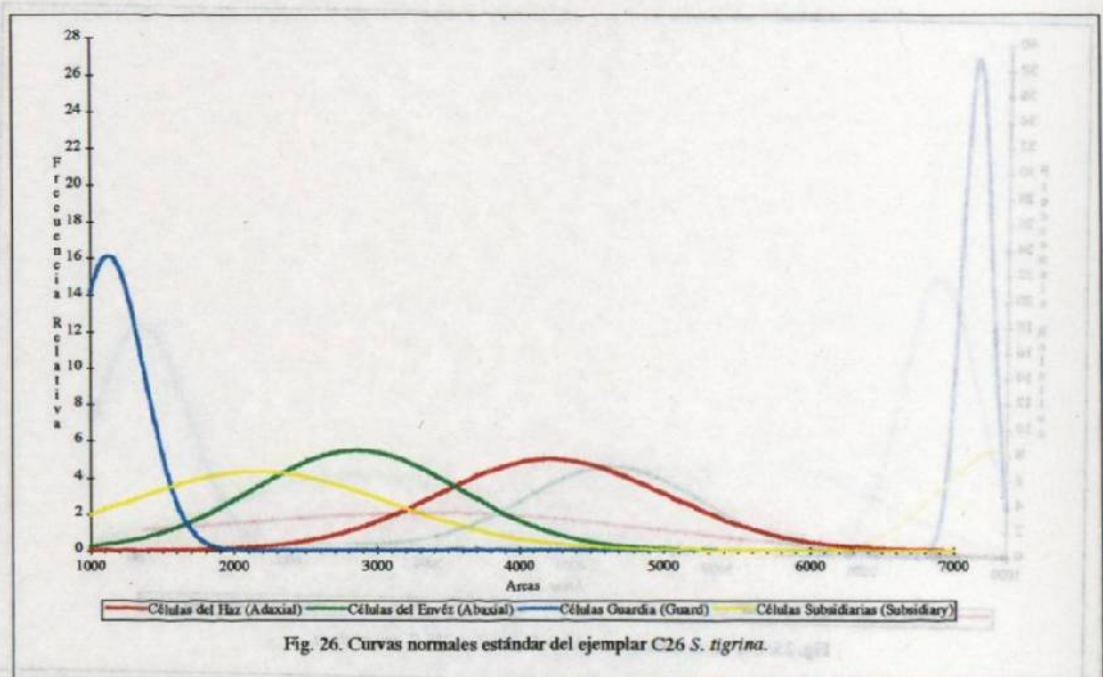


Fig. 26. Curvas normales estándar del ejemplar C26 *S. tigrina*.

Cuadro 27. Datos estadísticos de C27 *S. candida*.

C27 *S. candida* (Coll) Pl#251195-4 Colombia (1), Brasil, Venezuela, Ecuador y Perú

#	Células del Haz (Adaxial Cells)					Células Del Envéz (Abaxial Cells)					Células Guardia (Guard Cells)					Células Subsidiarias (Subsidiary Cells)				
	Largo (Lh)		Ancho (Ah)		Area	Largo (Le)		Ancho (Ae)		Area	Largo (Lg)		Ancho (Ag)		Area	Largo (La)		Ancho (As)		Area
	Index	μ_m	Index	μ_m	μ_m	Index	μ_m	Index	μ_m	μ_m	Index	μ_m	Index	μ_m	μ_m	Index	μ_m	Index	μ_m	μ_m
1	0.50	53.85	0.55	59.25	3189.35	0.40	43.08	0.50	53.85	2319.53	0.40	43.08	0.32	34.46	1484.50	0.42	45.23	0.35	37.69	1704.85
2	0.62	66.77	0.55	59.23	3954.79	0.50	53.85	0.50	53.85	2899.41	0.40	43.08	0.32	34.46	1484.50	0.40	43.08	0.25	26.92	1159.76
3	0.60	64.62	0.70	75.38	4871.01	0.50	53.85	0.40	43.08	2319.53	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.55	59.23	2551.48
4	0.62	66.77	0.65	70.00	4673.85	0.50	53.85	0.50	53.85	2899.41	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.20	21.54	1159.76
5	0.75	80.77	0.60	64.62	5218.93	0.58	62.46	0.45	48.46	3026.98	0.45	48.46	0.40	43.08	2087.57	0.45	48.46	0.20	21.54	1043.79
6	0.62	66.77	0.60	64.62	4314.32	0.45	48.46	0.35	37.69	1826.63	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.30	32.31	1391.72
7	0.68	73.23	0.60	64.62	4731.83	0.40	43.08	0.40	43.08	1855.62	0.40	43.08	0.30	32.31	1391.72	0.35	37.69	0.30	32.31	1217.75
8	0.62	66.77	0.50	53.85	3595.27	0.60	64.62	0.60	64.62	4175.15	0.40	43.08	0.28	30.15	1298.93	0.40	43.08	0.45	48.46	2087.57
9	0.90	96.92	0.60	64.62	6262.72	0.35	37.69	0.50	53.85	2029.59	0.38	40.92	0.25	26.92	1101.77	0.45	48.46	0.30	32.31	1565.68
10	0.75	80.77	0.50	53.85	4349.11	0.55	59.23	0.40	43.08	2551.48	0.40	43.08	0.30	32.31	1391.72	0.45	48.46	0.20	21.54	1043.79
11	0.85	91.54	0.50	53.85	4928.99	0.60	64.62	0.40	43.08	2783.43	0.40	43.08	0.25	26.92	1159.76	0.35	37.69	0.35	37.69	1420.71
12	0.80	86.15	0.50	53.85	4639.05	0.60	64.62	0.50	53.85	3479.29	0.35	37.69	0.30	32.31	1217.75	0.35	37.69	0.40	43.08	1623.67
13	0.85	91.54	0.50	53.85	4928.99	0.35	37.69	0.35	37.69	1420.71	0.35	37.69	0.30	32.31	1217.75	0.42	45.23	0.30	32.31	1461.30
14	0.70	75.38	0.50	53.85	4059.17	0.60	64.62	0.45	48.46	3131.36	0.35	37.69	0.30	32.31	1217.75	0.40	43.08	0.45	48.46	2087.57
15	0.48	51.69	0.45	48.46	2505.09	0.70	75.38	0.45	48.46	3653.25	0.40	43.08	0.28	30.15	1298.93	0.45	48.46	0.55	59.23	2870.41
16	1.00	107.69	0.60	64.62	6958.58	0.45	48.46	0.40	43.08	2087.57	0.40	43.08	0.30	32.31	1391.72	0.32	34.46	0.30	32.31	1113.57
17	1.00	107.69	0.60	64.62	6958.58	0.32	34.46	0.60	64.62	2226.75	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.30	32.31	1391.72
18	1.00	107.69	0.52	56.00	6050.77	0.35	37.69	0.60	64.62	2485.50	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.30	32.31	1391.72
19	0.95	102.31	0.60	64.62	6610.65	0.45	48.46	0.62	66.77	3235.74	0.35	37.69	0.25	26.92	1014.79	0.30	32.31	0.35	37.69	1217.75
20	0.95	102.31	0.60	64.62	6610.65	0.50	53.85	0.50	53.85	2899.41	0.40	43.08	0.30	32.31	1391.72	0.35	37.69	0.45	48.46	1826.63
21	0.75	80.77	0.50	53.85	4349.11	0.60	64.62	0.60	64.62	4175.15	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.50	53.85	2319.53
22	0.60	64.62	0.70	75.38	4871.01	0.55	59.23	0.55	59.23	3508.28	0.40	43.08	0.30	32.31	1391.72	0.30	32.31	0.50	53.85	1739.64
23	0.50	53.85	0.50	53.85	2899.41	0.70	75.38	0.32	34.46	2597.87	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.25	26.92	1159.76
24	0.70	75.38	0.60	64.62	4871.01	0.55	59.23	0.32	34.46	2041.18	0.40	43.08	0.30	32.31	1391.72	0.42	45.23	0.40	43.08	1948.40
25	0.70	75.38	0.62	66.77	5033.37	0.60	64.62	0.60	64.62	4175.15	0.35	37.69	0.30	32.31	1217.75	0.38	40.92	0.25	26.92	1101.77
Suma	1991.23		1522.77	121415.60		1373.08		1277.23	69733.95	9.78	1053.23	7.45	802.31	33894.08		1061.85		942.31	39600.11	
Promedio	79.65		60.91	4856.62		54.92		51.09	2776.76	0.39	42.13	0.30	32.09	1255.25		42.47		37.69	1584.00	
D.E. (σ)	17.49		7.20	1200.78		11.61		10.26	768.86	0.02	2.55	0.03	3.03	192.28		5.26		11.53	494.55	

Promedio del área de las células del haz: 4856.62 micras cuadradas 205.90 células/mm cuadrados
 Promedio del área de las células del envéz: 2790.16 micras cuadradas 358.40 células/mm cuadrados
 El promedio de las células del haz es 1.74 veces el promedio de las células del envéz.
 El promedio de las células guardia es 1.31 veces el promedio del ancho.
 El promedio de las células subsidiarias es 1.13 veces el promedio del ancho.

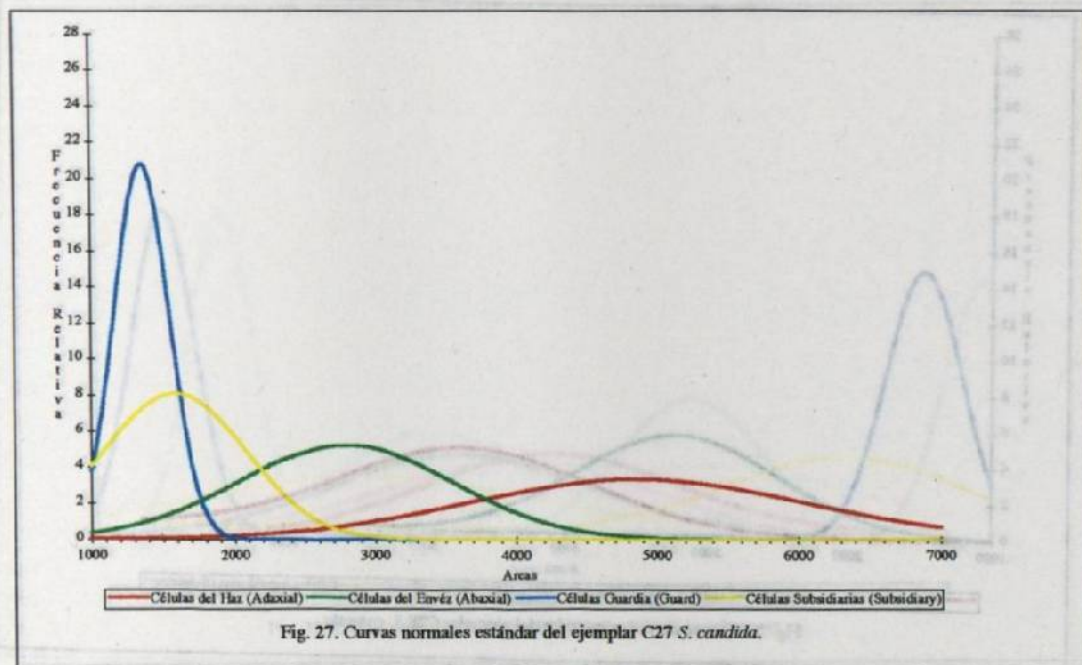


Fig. 27. Curvas normales estándar del ejemplar C27 *S. candida*.

Cuadro 28. Datos estadísticos de C28 *S. connata*.

C28 *S. connata* (Coli) Pl#200696-4 Colombia (I), Ecuador, y Perú

#	Células del Haz (Abaxial Cells)					Células del Envés (Abaxial Cells)					Células Guardia (Guard Cells)					Células Subsidiarias (Subsidiary Cells)				
	Largo (Lh)		Ancho (Ah)		Área	Largo (Le)		Ancho (Ae)		Área	Largo (Lg)		Ancho (Ag)		Área	Largo (Ls)		Ancho (As)		Área
	Indice	μ_m	Indice	μ_m	μ_m	Indice	μ_m	Indice	μ_m	μ_m	Indice	μ_m	Indice	μ_m	μ_m	Indice	μ_m	Indice	μ_m	μ_m
1	0.92	99.08	0.50	53.85	5334.91	0.50	53.85	0.46	49.54	2667.46	0.38	40.92	0.32	34.46	1410.27	0.50	53.85	0.30	32.31	1739.64
2	0.80	86.15	0.41	44.15	3804.02	0.61	65.69	0.48	51.69	3395.79	0.35	37.69	0.30	32.31	1217.75	0.45	48.46	0.30	32.31	1565.68
3	0.72	77.54	0.45	48.46	3757.63	0.70	75.38	0.47	50.62	3815.62	0.30	32.31	0.25	26.92	869.82	0.50	53.85	0.45	48.46	2609.47
4	0.92	99.08	0.45	48.46	4801.42	0.60	64.62	0.48	51.69	3340.12	0.40	43.08	0.30	32.31	1391.72	0.35	37.69	0.40	43.08	1623.67
5	1.06	114.15	0.50	53.85	6146.74	0.68	73.23	0.40	43.08	3154.56	0.35	37.69	0.30	32.31	1217.75	0.42	45.23	0.45	48.46	2191.95
6	0.65	70.00	0.60	64.62	4323.08	0.50	53.85	0.40	43.08	2319.33	0.40	43.08	0.40	43.08	1855.62	0.50	53.85	0.50	53.85	2899.41
7	0.71	76.46	0.50	53.85	4117.16	0.50	53.85	0.35	37.69	2029.59	0.38	40.92	0.30	32.31	1322.13	0.38	40.92	0.25	26.92	1101.77
8	0.80	86.15	0.40	43.08	3711.24	0.55	59.23	0.50	53.85	3189.35	0.40	43.08	0.40	43.08	1855.62	0.38	40.92	0.20	21.54	881.42
9	1.00	107.69	0.40	43.08	4639.05	0.63	67.85	0.45	48.46	3287.93	0.40	43.08	0.40	43.08	1855.62	0.55	59.23	0.60	64.62	3827.22
10	0.70	75.38	0.50	53.85	4059.17	0.78	84.00	0.39	42.00	3528.00	0.40	43.08	0.30	32.31	1391.72	0.30	32.31	0.30	32.31	1043.79
11	0.71	76.46	0.55	59.23	4528.88	0.80	86.15	0.55	59.23	5102.96	0.40	43.08	0.30	32.31	1391.72	0.55	59.23	0.60	64.62	3827.22
12	0.78	84.00	0.52	56.00	4704.00	0.60	64.62	0.40	43.08	2783.43	0.32	34.46	0.32	34.46	1187.60	0.62	66.77	0.50	53.85	3395.27
13	0.75	80.77	0.50	53.85	4349.11	0.60	64.62	0.40	43.08	2783.43	0.35	37.69	0.35	37.69	1420.71	0.45	48.46	0.25	26.92	1304.73
14	0.90	96.92	0.60	64.62	6262.72	0.52	56.00	0.51	54.92	3075.69	0.35	37.69	0.30	32.31	1217.75	0.45	48.46	0.20	21.54	1043.79
15	0.90	96.92	0.45	48.46	4697.04	0.60	64.62	0.41	44.15	2853.02	0.40	43.08	0.32	34.46	1484.50	0.40	43.08	0.42	45.23	1948.40
16	0.71	76.46	0.45	48.46	3705.44	0.50	53.85	0.43	46.31	2493.49	0.35	37.69	0.30	32.31	1217.75	0.50	53.85	0.32	34.46	1855.62
17	0.90	96.92	0.60	64.62	6262.72	0.60	64.62	0.40	43.08	2783.43	0.35	37.69	0.35	37.69	1420.71	0.45	48.46	0.40	43.08	2087.57
18	0.81	87.23	0.60	64.62	5636.45	0.61	65.69	0.40	43.08	2829.82	0.42	45.23	0.40	43.08	1948.40	0.50	53.85	0.20	21.54	1159.76
19	0.70	75.38	0.60	64.62	4871.01	0.48	51.69	0.50	53.85	2783.43	0.40	43.08	0.38	40.92	1762.84	0.45	48.46	0.25	26.92	1304.73
20	0.80	86.15	0.50	53.85	4639.05	0.60	64.62	0.59	63.54	4105.56	0.38	40.92	0.32	34.46	1410.27	0.45	48.46	0.25	26.92	1304.73
21	0.81	87.23	0.50	53.85	4697.04	0.65	70.00	0.48	51.69	3618.46	0.45	48.46	0.32	34.46	1670.06	0.40	43.08	0.50	53.85	2319.53
22	0.98	105.54	0.50	53.85	5682.84	0.70	75.38	0.52	56.00	4221.54	0.38	40.92	0.35	37.69	1542.48	0.50	53.85	0.30	32.31	1739.64
23	0.60	64.62	0.45	48.46	3131.36	0.64	68.92	0.50	53.85	3711.24	0.40	43.08	0.40	43.08	1855.62	0.60	64.62	0.45	48.46	3131.36
24	1.00	107.69	0.51	54.92	5914.79	0.82	88.31	0.45	48.46	4279.33	0.40	43.08	0.35	37.69	1623.67	0.48	51.69	0.30	32.31	1670.06
25	0.79	85.08	0.42	45.23	3848.09	0.42	45.23	0.45	48.46	2191.95	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.50	53.85	2319.53
Suma	2199.08			1341.85	117824.98		1635.85		1224.46	80344.91	9.51	1024.15	8.33	897.08	36933.82		1241.69		989.69	50095.97
Promedio	87.96			53.67	4713.06		65.43		48.98	3213.80	0.38	40.97	0.33	35.88	1477.35		49.67		39.59	2003.84
D.E. (σ)	12.97			6.95	878.44		10.92		6.17	723.05	0.03	3.56	0.04	4.58	268.49		8.07		13.34	879.68

Promedio del área de las células del haz: 4713.00 micras cuadradas 212.18 células/mm cuadrados
 Promedio del área de las células del envés: 3213.80 micras cuadradas 311.16 células/mm cuadrados
 El promedio de las células del haz es 1.47 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.14 veces el promedio del ancho.
 El promedio de las células subsidiarias es 1.25 veces el promedio del ancho.

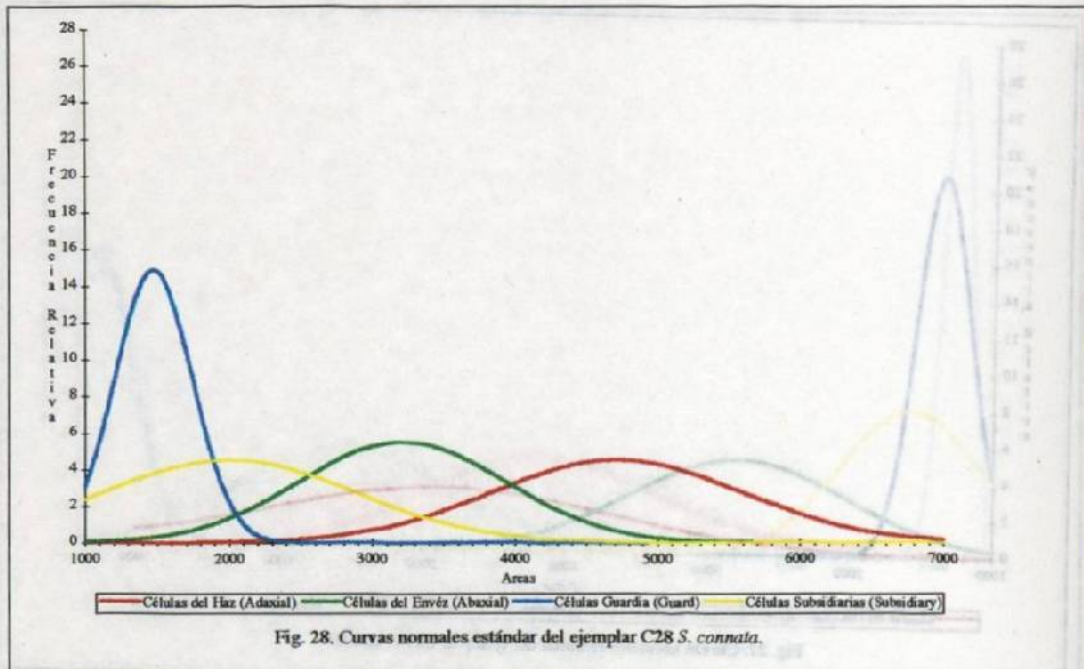


Fig. 28. Curvas normales estándar del ejemplar C28 *S. connata*.

Cuadro 29. Datos estadísticos de C29 *S. haselowniana*.

C29 *S. haselowniana* (Perú) P1#200695-5 Perú (1)

#	Células del Haz (Adaxial Cells)					Células del Envés (Abaxial Cells)					Células Guardia (Guard Cells)					Células Subsidiarias (Subsidiary Cells)				
	Largo (Lh)		Ancho (Ah)		Área	Largo (Le)		Ancho (Ae)		Área	Largo (Lg)		Ancho (Ag)		Área	Largo (Ls)		Ancho (As)		Área
	Index	μ_m	Index	μ_m	μ_m	Index	μ_m	Index	μ_m	μ_m	Index	μ_m	Index	μ_m	μ_m	Index	μ_m	Index	μ_m	μ_m
1	0.90	96.92	0.50	53.85	5218.93	0.50	53.85	0.50	53.85	2899.41	0.40	43.08	0.30	32.31	1391.72	0.45	48.46	0.25	26.92	1304.73
2	0.70	75.38	0.45	48.46	3653.25	0.60	64.62	0.50	53.85	3479.29	0.50	53.85	0.32	34.46	1855.62	0.40	43.08	0.40	43.08	1855.62
3	0.65	70.00	0.50	53.85	3769.23	0.60	64.62	0.55	59.23	3827.22	0.40	43.08	0.30	32.31	1391.72	0.58	62.46	0.42	45.23	2825.18
4	0.70	75.38	0.45	48.46	3653.25	0.75	80.77	0.60	64.62	5218.93	0.40	43.08	0.25	26.92	1159.76	0.70	75.38	0.40	43.08	3247.34
5	0.68	73.23	0.40	43.08	3154.56	0.55	59.23	0.50	53.85	3189.35	0.40	43.08	0.30	32.31	1391.72	0.65	70.00	0.32	34.46	2412.31
6	0.68	73.23	0.40	43.08	3154.56	0.50	53.85	0.48	51.69	2783.43	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.45	48.46	2609.47
7	0.90	96.92	0.50	53.85	5218.93	0.55	59.23	0.50	53.85	3189.35	0.50	53.85	0.32	34.46	1855.62	0.56	60.31	0.28	30.15	1818.51
8	1.10	118.46	0.50	53.85	6378.70	0.50	53.85	0.50	53.85	2899.41	0.40	43.08	0.30	32.31	1391.72	0.60	64.62	0.55	59.23	3827.22
9	0.60	64.62	0.40	43.08	2783.43	0.30	32.31	0.40	43.08	1391.72	0.45	48.46	0.30	32.31	1365.08	0.65	70.00	0.45	48.46	3392.31
10	0.70	75.38	0.55	59.23	4465.09	0.50	53.85	0.50	53.85	2899.41	0.40	43.08	0.35	37.69	1623.67	0.50	53.85	0.20	21.54	1159.76
11	0.80	86.15	0.60	64.62	5566.86	0.65	70.00	0.50	53.85	3769.23	0.35	37.69	0.20	21.54	811.83	0.40	43.08	0.20	21.54	927.81
12	0.65	70.00	0.50	53.85	3769.23	0.60	64.62	0.55	59.23	3827.22	0.45	48.46	0.32	34.46	1670.06	0.42	45.23	0.40	43.08	1948.40
13	0.70	75.38	0.50	53.85	4059.17	0.50	53.85	0.55	59.23	3189.35	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.50	53.85	2899.41
14	0.60	64.62	0.50	53.85	3479.29	0.55	59.23	0.55	59.23	3508.28	0.40	43.08	0.30	32.31	1391.72	0.62	66.77	0.75	80.77	3392.31
15	0.60	64.62	0.50	53.85	3479.29	0.50	53.85	0.55	59.23	3189.35	0.40	43.08	0.28	30.15	1298.93	0.62	66.77	0.62	66.77	4458.13
16	0.62	66.77	0.60	64.62	4314.32	0.60	64.62	0.50	53.85	3479.29	0.40	43.08	0.28	30.15	1298.93	0.68	73.23	0.60	64.62	4731.83
17	0.60	64.62	0.60	64.62	4175.15	0.50	53.85	0.48	51.69	2783.43	0.40	43.08	0.30	32.31	1391.72	0.60	64.62	0.50	53.85	3479.29
18	0.55	59.23	0.55	59.23	3508.28	0.48	51.69	0.60	64.62	3340.12	0.40	43.08	0.30	32.31	1391.72	0.60	64.62	0.50	53.85	3479.29
19	0.60	64.62	0.55	59.23	3827.22	0.50	53.85	0.65	70.00	3769.23	0.38	40.92	0.35	37.69	1542.48	0.65	70.00	0.60	64.62	4523.08
20	0.60	64.62	0.60	64.62	4175.15	0.70	75.38	0.70	75.38	5682.84	0.40	43.08	0.35	37.69	1623.67	0.50	53.85	0.70	75.38	4059.17
21	0.80	86.15	0.50	53.85	4639.05	0.65	70.00	0.70	75.38	5276.92	0.40	43.08	0.35	37.69	1623.67	0.75	80.77	0.40	43.08	3479.29
22	0.85	91.54	0.60	64.62	5914.79	0.60	64.62	0.65	70.00	4523.08	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.20	21.54	927.81
23	0.55	59.23	0.60	64.62	3827.22	0.60	64.62	0.60	64.62	4175.15	0.45	48.46	0.30	32.31	1365.08	0.50	53.85	0.30	32.31	1739.64
24	0.60	64.62	0.62	66.77	4314.32	0.50	53.85	0.60	64.62	3479.29	0.40	43.08	0.35	37.69	1623.67	0.60	64.62	0.45	48.46	3131.36
25	0.65	70.00	0.65	70.00	4900.00	0.45	48.46	0.60	64.62	3131.36	0.50	53.85	0.30	32.31	1739.64	0.45	48.46	0.35	37.69	1826.63
Suma	1871.69		1412.92	105399.27		1478.62		1487.23	88901.64	10.38	1117.85	7.62	820.62	36776.09		1494.77		1162.00	71456.49	
Promedio	74.87		56.52	4215.97		59.14		59.49	3556.07	0.42	44.71	0.30	32.82	1471.08		59.79		46.48	2858.26	
D.E. (σ)	14.10		7.74	898.67		9.77		7.92	907.44	0.04	4.09	0.03	3.57	221.49		10.91		16.33	1251.00	

Promedio del área de las células del haz: 4215.97 micras cuadradas
 Promedio del área de las células del envés: 3556.07 micras cuadradas
 El promedio de las células del haz es 1.19 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.36 veces el promedio del ancho.
 El promedio de las células subsidiarias es 1.29 veces el promedio del ancho.

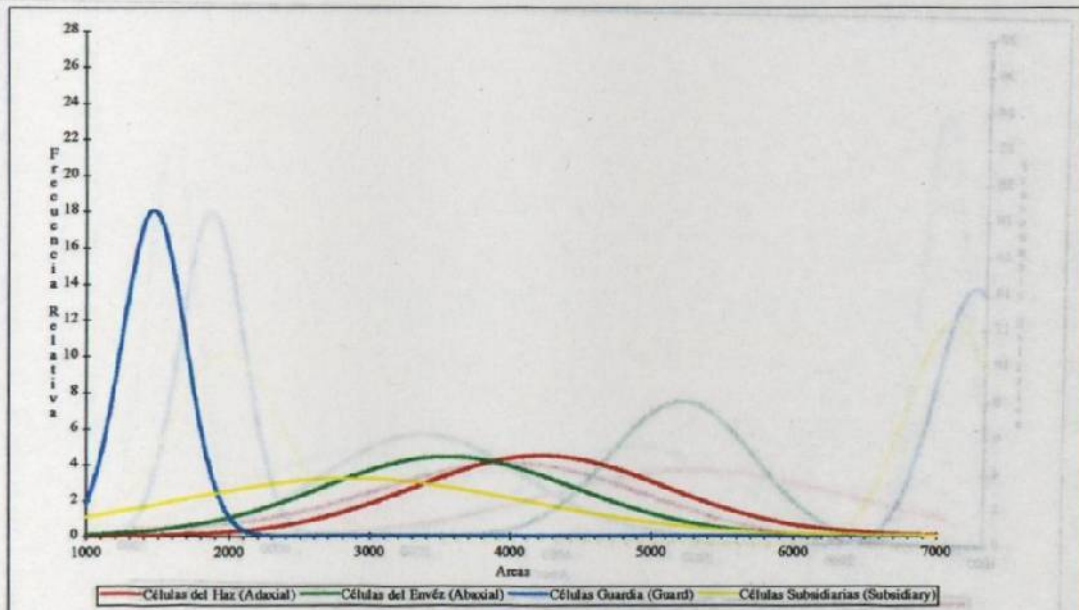


Fig. 29. Curvas normales estándar del ejemplar C29 *S. haselowniana*.

Cuadro 30 Datos estadísticos de C30 S. impressa.

C30 S. impressa (Col) P#200696-6 Colombia (1); Ecuador

#	Células del Haz (Adaxial Cella)				Células del Envés (Abaxial Cella)				Células Guardia (Guard Cells)				Células Subsidiarias (Subidiary Cella)								
	Largo (Lh)		Ancho (Ah)		Largo (Le)		Ancho (Ae)		Largo (Lg)		Ancho (Ag)		Largo (Ls)		Ancho (as)						
	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m					
1	0.50	53.85	0.65	70.00	3769.23	0.56	60.31	0.51	54.92	3312.28	0.38	40.92	0.30	32.31	1322.13	0.49	52.77	0.30	32.31	1704.85	
2	0.45	48.46	0.65	70.00	3392.31	0.52	56.00	0.51	54.92	3075.69	0.38	40.92	0.30	32.31	1322.13	0.44	47.38	0.24	25.85	1224.71	
3	0.45	48.46	0.65	70.00	3392.31	0.60	64.62	0.50	53.85	3479.29	0.30	32.31	0.20	21.54	695.86	0.51	54.92	0.28	30.15	1656.14	
4	0.50	53.85	0.58	62.46	3363.31	0.46	49.54	0.55	59.23	2934.20	0.40	43.08	0.32	34.46	1484.50	0.58	62.46	0.23	24.77	1547.12	
5	0.68	73.23	0.68	73.23	5362.74	0.46	49.54	0.52	56.00	2774.15	0.30	32.31	0.20	21.54	695.86	0.46	49.54	0.30	32.31	1600.47	
6	0.50	53.85	0.50	53.85	2899.41	0.46	49.54	0.48	51.69	2560.76	0.30	32.31	0.20	21.54	695.86	0.55	59.23	0.25	26.92	1594.67	
7	0.48	51.69	0.70	75.38	3896.80	0.45	48.46	0.50	53.85	2609.47	0.40	43.08	0.20	21.54	927.81	0.48	51.69	0.20	21.54	1113.37	
8	0.50	53.85	0.68	73.23	3943.19	0.41	44.15	0.58	62.46	2757.92	0.40	43.08	0.25	26.92	1159.76	0.46	49.54	0.20	21.54	1066.98	
9	0.50	53.85	0.65	70.00	3769.23	0.50	53.85	0.70	75.38	4059.17	0.42	45.23	0.25	26.92	1217.75	0.50	53.85	0.22	23.69	1275.74	
10	0.50	53.85	0.55	59.23	3189.35	0.65	70.00	0.45	48.46	48.46	3392.31	0.38	40.92	0.25	26.92	1101.77	0.42	45.23	0.20	21.54	974.20
11	0.70	75.38	0.65	70.00	5276.92	0.41	44.15	0.48	51.69	2282.41	0.30	32.31	0.20	21.54	695.86	0.47	50.62	0.28	30.15	1526.25	
12	0.62	66.77	0.70	75.38	5083.37	0.55	59.23	0.45	48.46	2870.41	0.35	37.69	0.25	26.92	1014.79	0.41	44.15	0.30	32.31	1426.51	
13	0.58	62.46	0.68	73.23	4574.11	0.45	48.46	0.46	49.54	2400.71	0.40	43.08	0.35	37.69	1623.67	0.41	44.15	0.31	33.38	1474.06	
14	0.60	64.62	0.60	64.62	4175.15	0.71	76.46	0.50	53.85	4117.16	0.40	43.08	0.20	21.54	927.81	0.40	43.08	0.21	22.62	974.20	
15	0.62	66.77	0.60	64.62	4314.32	0.50	53.85	0.58	62.46	3363.31	0.40	43.08	0.30	32.31	1391.72	0.41	44.15	0.20	21.54	951.01	
16	0.50	53.85	0.72	77.54	4175.15	0.56	60.31	0.51	54.92	3312.28	0.30	32.31	0.30	32.31	1043.79	0.45	48.46	0.26	28.00	1356.92	
17	0.50	53.85	0.70	75.38	4059.17	0.58	62.46	0.42	45.23	2825.18	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.20	21.54	927.81	
18	0.50	53.85	0.80	86.15	4639.05	0.51	54.92	0.45	48.46	2661.66	0.40	43.08	0.30	32.31	1391.72	0.41	44.15	0.24	25.85	1141.21	
19	0.50	53.85	0.60	64.62	3479.29	0.48	51.69	0.55	59.23	3061.77	0.35	37.69	0.25	26.92	1014.79	0.33	35.54	0.20	21.54	765.44	
20	0.75	80.77	0.60	64.62	5218.93	0.70	75.38	0.48	51.69	3896.80	0.30	32.31	0.30	32.31	1043.79	0.39	42.00	0.40	43.08	1809.23	
21	0.70	75.38	0.70	75.38	5682.84	0.50	53.85	0.50	53.85	2899.41	0.35	37.69	0.25	26.92	1014.79	0.40	43.08	0.20	21.54	927.81	
22	0.45	48.46	0.55	59.23	2870.41	0.49	52.77	0.46	49.54	2614.11	0.35	37.69	0.25	26.92	1014.79	0.40	43.08	0.26	28.00	1206.15	
23	0.70	75.38	0.62	66.77	5083.37	0.50	53.85	0.60	64.62	3479.29	0.35	37.69	0.30	32.31	1217.75	0.40	43.08	0.20	21.54	927.81	
24	0.70	75.38	0.70	75.38	5682.84	0.55	59.23	0.60	64.62	3827.22	0.30	32.31	0.20	21.54	695.86	0.35	37.69	0.20	21.54	811.83	
25	0.80	86.15	0.70	75.38	6494.67	0.59	63.54	0.50	53.85	3421.30	0.30	32.31	0.20	21.54	695.86	0.35	37.69	0.18	19.38	730.65	
Suma	1537.85		1745.69		107687.49		1416.15		1382.77	77988.27	8.91	959.54	6.42	691.38	26802.13		1170.62		652.62	30715.17	
Promedio	61.51		69.83		4307.50		56.65		55.31	3119.56	0.36	38.38	0.26	27.66	1073.96		46.82		26.10	1228.61	
D.E. (e)	11.45		7.07		962.07		8.61		6.67	511.66	0.04	4.74	0.05	5.10	278.58		6.53		5.59	322.03	

Promedio del área de las células del haz: 4307.50 micras cuadradas = 232.15 células/mm cuadrados
 Promedio del área de las células del envés: 3119.53 micras cuadradas = 320.56 células/mm cuadrados
 El promedio de las células del haz es 138 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.39 veces el promedio del ancho.
 El promedio de las células subsidiarias es 1.79 veces el promedio del ancho.

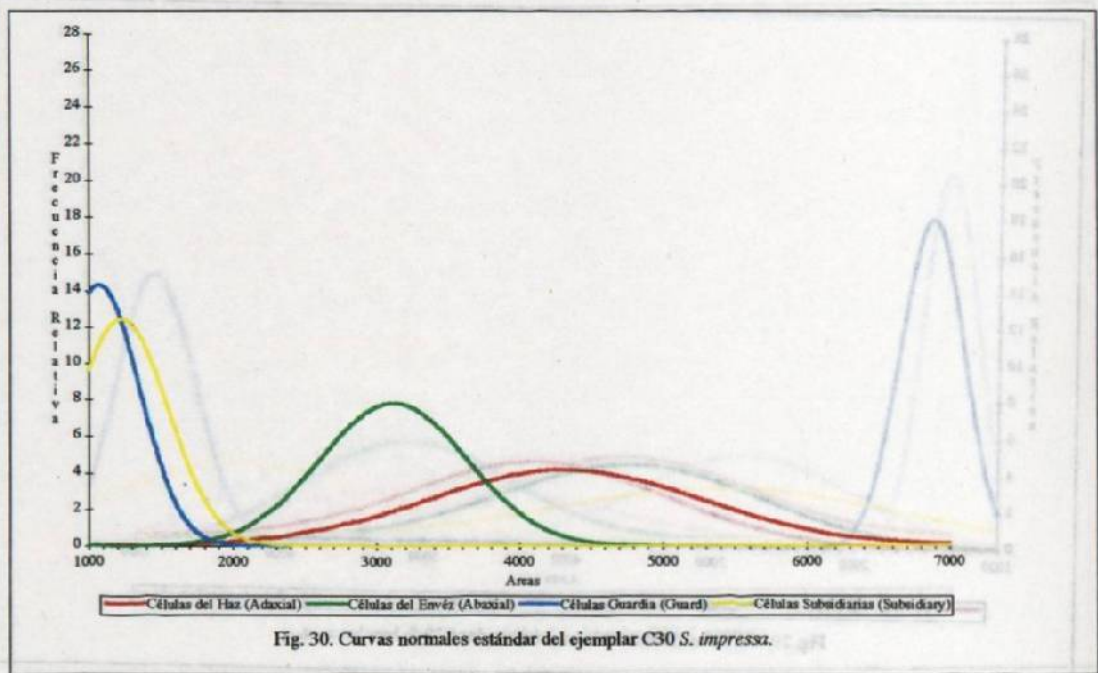


Fig. 30. Curvas normales estándar del ejemplar C30 S. impressa.

Cuadro 31. Datos estadísticos de C31 *S. platyceras*.

C31 *S. platyceras* (Coll) P#200696-7 Colombia (1)

#	Células del Haz (Axial Cells)					Células del Envés (Abaxial Cells)					Células Guardia (Guard Cells)					Células Subsidiarias (Subsidiary Cells)				
	Largo (Lh)		Ancho (Ah)		Área	Largo (Lz)		Ancho (Az)		Área	Largo (Lg)		Ancho (Ag)		Área	Largo (Ls)		Ancho (As)		Área
	Indice	μ_m	Indice	μ_m		Indice	μ_m	Indice	μ_m		Indice	μ_m	Indice	μ_m		Indice	μ_m	Indice	μ_m	
1	0.72	77.54	0.59	63.54	4926.67	0.52	56.00	0.51	54.92	3075.69	0.45	48.46	0.41	44.15	2139.76	0.45	48.46	0.40	43.08	2087.57
2	0.70	75.38	0.65	70.00	5276.92	0.60	64.62	0.46	49.54	3200.95	0.42	45.23	0.40	43.08	1948.40	0.48	51.69	0.35	37.69	1948.40
3	0.99	106.62	0.72	77.54	8266.79	0.58	62.46	0.40	43.08	2690.65	0.46	49.54	0.38	40.92	2027.27	0.35	37.69	0.31	33.38	1258.34
4	0.68	73.23	0.60	64.62	4731.83	0.64	68.92	0.50	53.85	3711.24	0.45	48.46	0.36	38.77	1878.82	0.39	42.00	0.30	32.31	1356.92
5	0.82	88.31	0.65	70.00	6181.54	0.61	65.69	0.40	43.08	2829.82	0.40	43.08	0.36	38.77	1670.06	0.40	43.08	0.36	38.77	1670.06
6	0.79	85.08	0.61	65.69	5588.90	0.70	75.38	0.42	45.23	3409.70	0.42	45.23	0.40	43.08	1948.40	0.40	43.08	0.32	34.46	1484.50
7	0.99	106.62	0.61	65.69	7003.81	0.75	80.77	0.47	50.62	4088.17	0.45	48.46	0.38	40.92	1983.19	0.41	44.15	0.37	39.85	1759.36
8	0.70	75.38	0.60	64.62	4871.01	0.50	53.85	0.46	49.54	2667.46	0.45	48.46	0.36	38.77	1878.82	0.55	59.23	0.32	34.46	2041.18
9	0.70	75.38	0.50	53.85	4059.17	0.59	63.54	0.42	45.23	2873.89	0.40	43.08	0.35	37.69	1623.67	0.40	43.08	0.35	37.69	1623.67
10	0.61	65.69	0.59	63.54	4173.99	0.60	64.62	0.58	62.46	4025.98	0.42	45.23	0.40	43.08	1948.40	0.40	43.08	0.32	34.46	1484.50
11	0.61	65.69	0.59	63.54	4173.99	0.62	66.77	0.69	74.31	4961.47	0.40	43.08	0.35	37.69	1623.67	0.50	53.85	0.35	37.69	2029.59
12	0.92	99.08	0.54	58.15	5761.70	0.70	75.38	0.60	64.62	4871.01	0.42	45.23	0.35	37.69	1704.85	0.48	51.69	0.38	40.92	2115.41
13	0.78	84.00	0.55	59.23	4975.38	0.71	76.46	0.50	53.85	4117.16	0.39	42.00	0.32	34.46	1447.38	0.58	62.46	0.32	34.46	2152.52
14	0.70	75.38	0.60	64.62	4871.01	0.62	66.77	0.50	53.85	3595.27	0.42	45.23	0.37	39.85	1802.27	0.52	56.00	0.39	42.00	2352.00
15	0.69	74.31	0.53	57.08	4241.25	0.60	64.62	0.50	53.85	3479.29	0.41	44.15	0.36	38.77	1711.81	0.58	62.46	0.38	40.92	2356.12
16	0.61	65.69	0.53	57.08	3749.51	0.56	60.31	0.45	48.46	2922.60	0.45	48.46	0.40	43.08	2087.57	0.45	48.46	0.35	37.69	1826.63
17	0.75	80.77	0.65	70.00	5653.85	0.50	53.85	0.42	45.23	2485.50	0.52	56.00	0.42	45.23	2532.92	0.45	48.46	0.38	40.92	1983.19
18	0.95	102.31	0.65	70.00	7161.54	0.57	61.38	0.40	43.08	2644.26	0.43	46.31	0.38	40.92	1895.05	0.45	48.46	0.36	38.77	1878.82
19	0.80	86.15	0.55	59.23	5102.96	0.60	64.62	0.54	58.15	3757.63	0.42	45.23	0.40	43.08	1948.40	0.45	48.46	0.40	43.08	2087.57
20	0.90	96.92	0.49	52.77	5114.56	0.56	60.31	0.55	59.23	3572.07	0.40	43.08	0.36	38.77	1670.06	0.42	45.23	0.38	40.92	1850.98
21	0.75	80.77	0.57	61.38	4957.99	0.65	70.00	0.41	44.15	3090.77	0.42	45.23	0.39	42.00	1899.69	0.45	48.46	0.33	35.54	1722.25
22	1.10	118.46	0.50	53.85	6378.70	0.60	64.62	0.43	46.31	2992.19	0.40	43.08	0.38	40.92	1762.84	0.58	62.46	0.42	45.23	2825.18
23	0.70	75.38	0.65	70.00	5276.92	0.50	53.85	0.40	43.08	2319.53	0.42	45.23	0.36	38.77	1753.56	0.48	51.69	0.40	43.08	2226.75
24	0.86	92.62	0.45	48.46	4488.28	0.65	70.00	0.50	53.85	3769.23	0.48	51.69	0.39	42.00	2171.08	0.52	56.00	0.44	47.38	2653.54
25	0.67	72.15	0.60	64.62	4662.25	0.51	54.92	0.47	50.62	2779.95	0.45	48.46	0.35	37.69	1826.63	0.48	51.69	0.42	45.23	2338.08
Suma	2098.92		1569.08		131650.51	1619.69		1290.15		83891.47	1157.69		1010.15		46884.59	1251.38		980.00		49313.13
Promedio	83.96		62.76		5266.00	64.79		51.61		3355.66	46.31		40.41		1675.36	50.06		39.20		1972.33
D.E. (σ)	14.18		6.74		1066.47	7.33		7.79		698.51	3.20		2.58		221.46	6.85		4.08		392.27

Promedio del área de las células del haz: 5266.02 micras cuadradas 189.90 células/mm cuadrados
 Promedio del área de las células del envés: 3355.66 micras cuadradas 298.00 células/mm cuadrados
 El promedio de las células del haz es 1.57 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.15 veces el promedio del ancho.
 El promedio de las células subsidiarias es 1.28 veces el promedio del ancho.

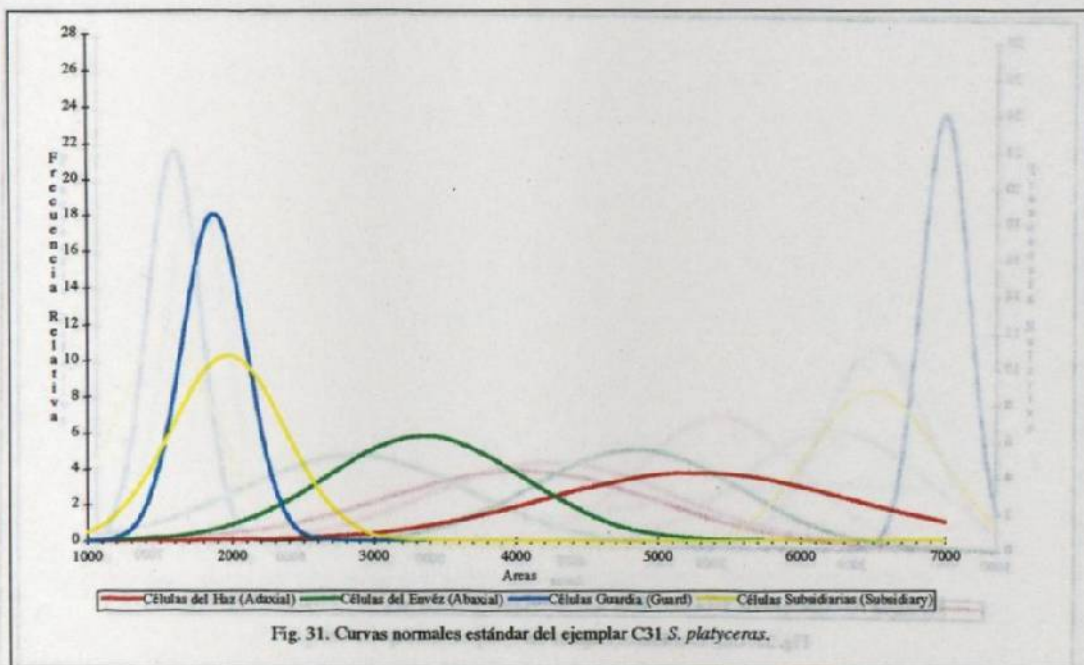


Fig. 31. Curvas normales estándar del ejemplar C31 *S. platyceras*.

Cuadro 32. Datos estadísticos de C32 *S. posadae*.

C32 *S. posadae* (Col) PI#200696-8 Colombia (I)

#	Células del Haz (Adaxial Cells)				Células del Envérz (Abaxial Cells)				Células Guardia (Guard Cells)				Células Subsidiarias (Subsidiary Cells)								
	Largo (Lh)		Ancho (Ah)		Largo (Le)		Ancho (Ae)		Largo (Lg)		Ancho (Ag)		Largo (La)		Ancho (Aa)						
	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m					
1	0.75	80.77	0.50	53.85	4349.11	0.62	66.77	0.52	56.00	3739.08	0.45	48.46	0.30	32.31	1565.68	0.50	53.85	0.50	53.85	2899.41	
2	0.80	86.15	0.55	59.23	5102.96	0.55	59.23	0.50	53.85	3189.35	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.30	32.31	1391.72	
3	0.70	75.38	0.55	59.23	4465.09	0.68	73.23	0.52	56.00	4100.92	0.40	43.08	0.30	32.31	1391.72	0.30	32.31	0.40	43.08	1391.72	
4	0.60	64.62	0.50	53.85	3479.29	0.59	63.54	0.47	50.62	3216.02	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.42	45.23	1948.40	
5	0.95	102.31	0.50	53.85	5508.87	0.69	74.31	0.50	53.85	4001.18	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.40	43.08	1855.62	
6	0.85	91.54	0.50	53.85	4928.99	0.65	70.00	0.48	51.69	3618.46	0.35	37.69	0.30	32.31	1217.75	0.35	37.69	0.40	43.08	1623.67	
7	1.00	107.69	0.45	48.46	4846	0.65	70.00	0.45	48.46	2870.41	0.38	40.92	0.30	32.31	1322.13	0.50	53.85	0.30	32.31	1739.64	
8	0.75	80.77	0.45	48.46	3914.20	0.60	64.62	0.41	44.15	2853.02	0.42	45.23	0.30	32.31	1461.30	0.50	53.85	0.25	26.92	1449.70	
9	0.90	96.92	0.60	64.62	6262.72	0.48	51.69	0.45	48.46	2505.09	0.45	48.46	0.30	32.31	1565.68	0.50	53.85	0.30	32.31	1739.64	
10	0.80	86.15	0.60	64.62	5566.86	0.49	52.77	0.52	56.00	2955.08	0.45	48.46	0.30	32.31	1565.68	0.42	45.23	0.35	37.69	1704.85	
11	0.60	64.62	0.50	53.85	3479.29	0.45	48.46	0.50	53.85	2609.47	0.38	40.92	0.20	21.54	881.42	0.45	48.46	0.25	26.92	1304.73	
12	0.50	53.85	0.50	53.85	2899.41	0.72	77.54	0.52	56.00	4342.15	0.35	37.69	0.30	32.31	1217.75	0.50	53.85	0.45	48.46	2609.47	
13	0.50	53.85	0.40	43.08	2319.33	0.70	73.38	0.52	56.00	4221.54	0.45	48.46	0.32	34.46	1670.06	0.50	53.85	0.30	32.31	1739.64	
14	0.80	86.15	0.50	53.85	4639.05	0.52	56.00	0.50	53.85	3015.38	0.40	43.08	0.32	34.46	1484.50	0.50	53.85	0.25	26.92	1449.70	
15	0.70	75.38	0.50	53.85	4059.17	0.68	73.23	0.55	59.23	4337.51	0.40	43.08	0.32	34.46	1484.50	0.45	48.46	0.30	32.31	1565.68	
16	0.90	96.92	0.50	53.85	5218.93	0.72	77.54	0.50	53.85	4175.15	0.40	43.08	0.30	32.31	1391.72	0.45	48.46	0.30	32.31	1565.68	
17	0.80	86.15	0.40	43.08	3711.24	0.62	66.77	0.44	47.38	3163.83	0.40	43.08	0.32	34.46	1484.50	0.45	48.46	0.25	26.92	1304.73	
18	0.60	64.62	0.45	48.46	3131.36	0.75	80.77	0.42	45.23	3653.25	0.40	43.08	0.28	30.15	1298.93	0.50	53.85	0.35	37.69	2029.39	
19	0.80	86.15	0.45	48.46	4175.15	0.72	77.54	0.52	56.00	4342.15	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.30	32.31	1739.64	
20	1.10	118.46	0.45	48.46	5740.83	0.64	68.92	0.50	53.85	3711.24	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.40	43.08	2319.33	
21	0.80	86.15	0.50	53.85	4639.05	0.55	59.23	0.45	48.46	2870.41	0.40	43.08	0.25	26.92	1159.76	0.50	53.85	0.50	53.85	2899.41	
22	0.65	70.00	0.40	43.08	3015.38	0.45	48.46	0.42	45.23	2191.95	0.40	43.08	0.25	26.92	1159.76	0.50	53.85	0.40	43.08	2319.33	
23	0.72	77.54	0.50	53.85	4175.15	0.75	80.77	0.58	62.46	5044.97	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.35	37.69	2029.39	
24	0.80	86.15	0.50	53.85	4639.05	0.47	50.62	0.57	61.38	3107.01	0.40	43.08	0.30	32.31	1391.72	0.45	48.46	0.35	37.69	1826.63	
25	0.65	70.00	0.50	53.85	3769.23	0.78	84.00	0.51	54.92	4613.54	0.35	37.69	0.30	32.31	1217.75	0.45	48.46	0.40	43.08	2087.57	
Suma	2048.31		1319.23	108408.86		1660.62		1326.77	88448.18	10.03	1080.15	7.36	792.62	34282.60	1235.23		944.46		46335.50		
Promedio	81.93		52.77	4336.35		66.42		53.07	3567.93	0.40	43.21	0.29	31.70	1371.30		49.41		37.78		1861.42	
D.E. (σ)	15.74		5.60	982.74		11.03		4.83	739.38	0.03	3.00	0.03	2.80	165.93		5.88		8.00		454.88	

Promedio del área de las células del haz: 4336.35

mieras cuadradas

230.61 células/mm cuadrados

Promedio del área de las células del envérz: 3537.93

mieras cuadradas

282.65 células/mm cuadrados

El promedio de las células del haz es

1.23 veces el promedio de las células del envérz.

El promedio de las células guardia es

1.36 veces el promedio del ancho.

El promedio de las células subsidiarias es

1.31 veces el promedio del ancho.

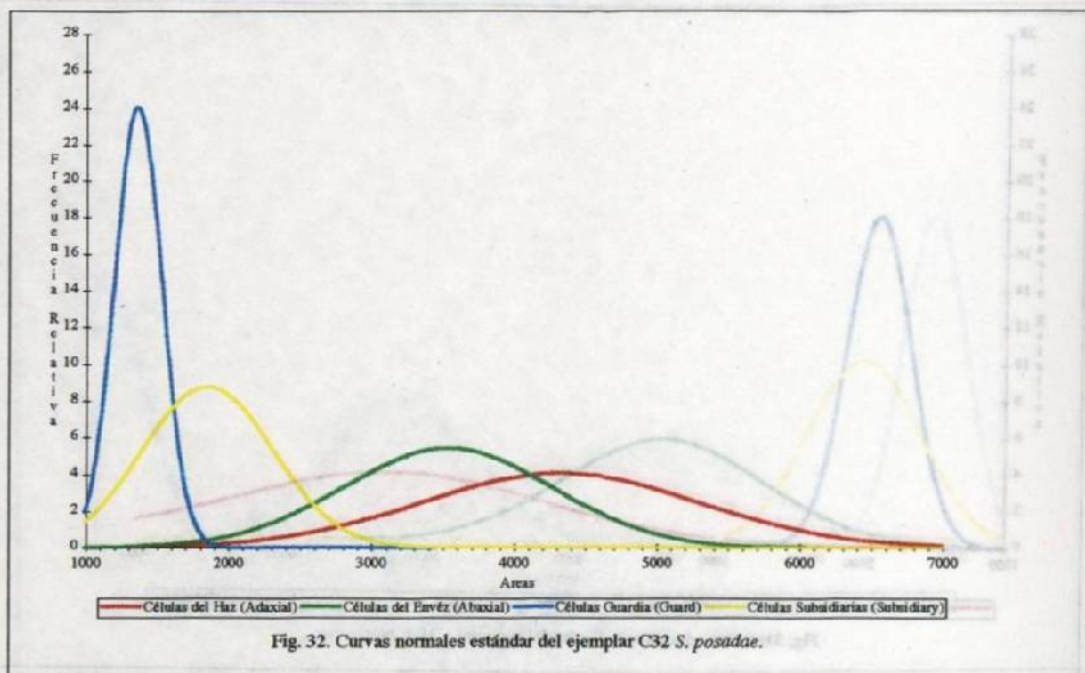


Fig. 32. Curvas normales estándar del ejemplar C32 *S. posadae*.

Cuadro 33. Datos estadísticos de C33 *S. tigrina*.

C33 *S. tigrina* (Gtm) P#200696-9 Guatemala (I) (dent. como *S. tigrina* 10jul96)

#	Células del Haz (Axiacal Cells)					Células del Envéz (Abaxial Cells)					Células Guardia (Guard Cells)					Células Subsidiarias (Subsidiary Cells)					
	Largo (Lh)		Ancho (Ah)		Area	Largo (Le)		Ancho (Ae)		Area	Largo (Lg)		Ancho (Ag)		Area	Largo (La)		Ancho (As)		Area	
	Indice	μ	Indice	μ	μ_{m}	Indice	μ	Indice	μ	μ_{m}	Indice	μ	Indice	μ	μ_{m}	Indice	μ	Indice	μ	μ_{m}	
1	0.60	64.62	0.50	53.85	3479.29	0.50	53.85	0.50	53.85	2899.41	0.45	48.46	0.30	32.31	1565.68	0.45	48.46	0.50	53.85	2609.47	
2	0.55	59.23	0.50	53.85	3189.35	0.50	53.85	0.40	43.08	2319.53	0.45	48.46	0.30	32.31	1565.68	0.45	48.46	0.32	34.46	1670.06	
3	0.85	91.54	0.52	56.00	5126.15	0.45	48.46	0.46	49.54	2400.71	0.45	48.46	0.30	32.31	1565.68	0.45	48.46	0.28	30.15	1461.30	
4	0.80	86.15	0.45	48.46	4175.15	0.64	68.92	0.50	53.85	3711.24	0.45	48.46	0.30	32.31	1565.68	0.45	48.46	0.30	32.31	1565.68	
5	0.80	86.15	0.60	64.62	5566.86	0.42	45.23	0.31	33.38	1510.01	0.45	48.46	0.35	37.69	1826.63	0.40	43.08	0.30	32.31	1391.72	
6	0.90	96.92	0.60	64.62	6262.72	0.50	53.85	0.44	47.38	2551.48	0.40	43.08	0.35	37.69	1623.67	0.40	43.08	0.28	30.15	1298.93	
7	1.00	107.69	0.50	53.85	5798.82	0.70	75.38	0.60	64.62	4871.01	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.20	21.54	927.81	
8	0.80	86.15	0.50	53.85	4639.05	0.58	62.46	0.41	44.15	2757.92	0.40	43.08	0.35	37.69	1623.67	0.45	48.46	0.30	32.31	1565.68	
9	0.75	80.77	0.55	59.23	4784.02	0.41	44.15	0.50	53.85	2377.51	0.40	43.08	0.30	32.31	1391.72	0.42	45.23	0.35	37.69	1704.85	
10	0.65	70.00	0.55	59.23	4146.15	0.55	59.23	0.50	53.85	3189.35	0.40	43.08	0.30	32.31	1391.72	0.35	37.69	0.32	34.46	1298.93	
11	0.65	70.00	0.40	43.08	3015.38	0.48	51.69	0.32	34.46	1781.40	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.28	30.15	1298.93	
12	0.60	64.62	0.50	53.85	3479.29	0.48	51.69	0.40	43.08	2226.75	0.50	53.85	0.35	37.69	2029.59	0.40	43.08	0.30	32.31	1391.72	
13	0.70	75.38	0.42	45.23	3409.70	0.55	59.23	0.30	33.85	3189.35	0.45	48.46	0.32	34.46	1670.06	0.40	43.08	0.25	26.92	1159.76	
14	0.45	48.46	0.50	53.85	2609.47	0.56	60.31	0.38	40.92	2467.98	0.40	43.08	0.30	32.31	1391.72	0.35	37.69	0.30	32.31	1217.75	
15	0.65	70.00	0.45	48.46	3392.31	0.41	44.15	0.58	62.46	2757.92	0.42	45.23	0.32	34.46	1558.72	0.48	51.69	0.32	34.46	1781.40	
16	0.70	75.38	0.50	53.85	4059.17	0.46	49.54	0.41	44.15	2187.31	0.40	43.08	0.32	34.46	1484.50	0.45	48.46	0.30	32.31	1565.68	
17	0.75	80.77	0.48	51.69	4175.15	0.62	66.77	0.40	43.08	2876.21	0.45	48.46	0.32	34.46	1670.06	0.45	48.46	0.30	32.31	1565.68	
18	0.88	94.77	0.45	48.46	4592.96	0.46	49.54	0.35	37.69	1867.22	0.40	43.08	0.30	32.31	1391.72	0.40	43.08	0.45	48.46	2087.57	
19	1.06	114.15	0.37	39.85	4548.59	0.40	43.08	0.35	37.69	1623.67	0.40	43.08	0.30	32.31	1391.72	0.30	32.31	0.30	32.31	1043.79	
20	0.82	88.31	0.50	53.85	4755.08	0.65	70.00	0.45	48.46	3392.31	0.40	43.08	0.30	32.31	1391.72	0.35	37.69	0.38	40.92	1542.48	
21	0.70	75.38	0.50	53.85	4059.17	0.57	61.38	0.46	49.54	3040.90	0.40	43.08	0.35	37.69	1623.67	0.38	40.92	0.38	40.92	1674.70	
22	0.87	93.69	0.40	43.08	4055.98	0.80	86.15	0.45	48.46	4175.15	0.40	43.08	0.25	26.92	1159.76	0.35	37.69	0.38	40.92	1542.48	
23	0.72	77.54	0.50	53.85	4175.15	0.58	62.46	0.50	53.85	3363.31	0.40	43.08	0.30	32.31	1391.72	0.35	37.69	0.30	32.31	1217.75	
24	0.82	88.31	0.41	44.15	3899.12	0.56	60.31	0.44	47.38	2857.66	0.42	45.23	0.32	34.46	1558.72	0.40	43.08	0.30	32.31	1391.72	
25	0.70	75.38	0.55	59.23	4465.09	0.62	66.77	0.56	60.31	4026.70	0.45	48.46	0.35	37.69	1826.63	0.32	34.46	0.30	32.31	1113.37	
Suma	2021.38		1313.85	105838.83		1448.46		1202.92	70421.98	10.54	1135.08	7.85	845.38	38443.83	1076.92		860.46		37089.23		
Promedio	80.86		52.55	4233.55		57.94		48.12	2816.88	0.42	45.40	0.31	33.82	1557.76		43.08		34.42		1483.57	
D.E. (σ)	14.84		6.36	869.12		10.63		8.19	815.48	0.03	3.04	0.02	2.66	183.44		5.09		6.58		346.95	

Promedio del área de las células del haz: 4233.55 micras cuadradas 23621 células/mm cuadrados
 Promedio del área de las células del envéz: 2816.88 micras cuadradas 355.00 células/mm cuadrados
 El promedio de las células del haz es 1.50 veces el promedio de las células del envéz.
 El promedio de las células guardia es 1.34 veces el promedio del ancho.
 El promedio de las células subsidiarias es 1.25 veces el promedio del ancho.

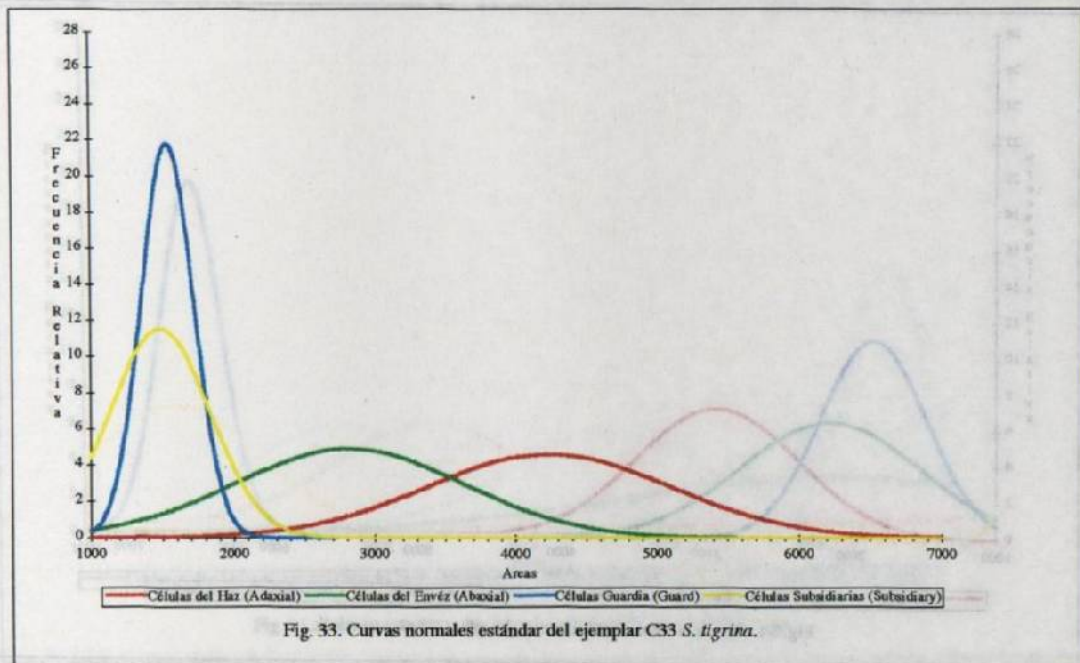


Fig. 33. Curvas normales estándar del ejemplar C33 *S. tigrina*.

Cuadro 34. Datos estadísticos de C-35 *G. utriculata*.

C35 *Gomera utriculata* (NLS) Pl#230796-2 Méx(1); NL; pared de la barranca acerca del camino; km#: 20 W. Cola Caballo; N 25 22.462; W 100 12.066'

#	Células del Haz (Adaxial Cells)				Células del Envés (Abaxial Cells)				Células guardia (Guard Cells)				Células Subsidiarias (Subsidiary Cells)							
	Largo (Lh)		Ancho (Ah)		Largo (Le)		Ancho (Ae)		Largo (Lg)		Ancho (Ag)		Largo (La)		Ancho (Aa)					
	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m				
1	0.51	54.92	0.50	53.85	2957.40	0.50	53.85	0.35	37.69	2029.59	0.40	43.08	0.41	44.15	1902.01	0.29	31.23	0.13	14.00	457.23
2	0.50	53.85	0.51	54.92	2957.40	0.50	53.85	0.54	58.15	3131.36	0.35	37.69	0.35	37.69	1420.71	0.32	34.46	0.14	15.08	519.57
3	0.60	64.62	0.56	60.31	3896.80	0.30	32.31	0.40	43.08	1391.72	0.40	43.08	0.40	43.08	1855.62	0.30	32.31	0.07	7.54	243.55
4	0.61	65.69	0.52	56.00	3678.77	0.35	37.69	0.50	53.85	2029.59	0.40	43.08	0.40	43.08	1855.62	0.30	32.31	0.20	21.54	695.86
5	0.50	53.85	0.53	57.08	3073.37	0.58	62.46	0.40	43.08	2690.65	0.45	48.46	0.39	42.00	2095.38	0.28	30.15	0.18	19.38	594.52
6	0.40	43.08	0.59	63.54	2737.04	0.42	45.23	0.42	45.23	2045.82	0.45	48.46	0.38	40.92	1983.19	0.40	43.08	0.10	10.77	463.91
7	0.45	48.46	0.71	76.46	3705.44	0.50	53.85	0.40	43.08	2319.53	0.47	50.62	0.40	43.08	2180.35	0.31	33.38	0.15	16.15	539.29
8	0.42	45.23	0.70	75.38	3409.70	0.30	32.31	0.50	53.85	1739.64	0.40	43.08	0.40	43.08	1855.62	0.34	36.62	0.11	11.85	433.75
9	0.43	46.31	0.65	70.00	3241.54	0.40	43.08	0.39	42.00	1809.23	0.41	44.15	0.41	44.15	1949.56	0.31	33.38	0.20	21.54	719.05
10	0.40	43.08	0.70	75.38	3247.34	0.50	53.85	0.50	53.85	2899.41	0.40	43.08	0.41	44.15	1902.01	0.40	43.08	0.16	17.23	742.25
11	0.45	48.46	0.51	54.92	2661.66	0.40	43.08	0.52	56.00	2412.31	0.39	42.00	0.31	33.38	1402.15	0.40	43.08	0.10	10.77	463.91
12	0.33	35.54	0.62	66.77	2372.88	0.30	32.31	0.60	64.62	2087.57	0.40	43.08	0.50	53.85	2319.53	0.32	34.46	0.16	17.23	599.80
13	0.41	44.15	0.52	56.00	2472.62	0.51	54.92	0.50	53.85	2957.40	0.39	42.00	0.26	28.00	1176.00	0.35	37.69	0.20	21.54	811.83
14	0.46	49.54	0.62	66.77	3307.64	0.29	31.23	0.42	45.23	1412.59	0.40	43.08	0.40	43.08	1855.62	0.35	37.69	0.20	21.54	811.83
15	0.39	42.00	0.55	59.23	2487.69	0.30	32.31	0.35	37.69	1217.75	0.40	43.08	0.35	37.69	1623.67	0.35	37.69	0.20	21.54	811.83
16	0.35	37.69	0.60	64.62	2435.50	0.35	37.69	0.32	34.46	1298.93	0.40	43.08	0.40	43.08	1855.62	0.30	32.31	0.20	21.54	695.86
17	0.50	53.85	0.62	66.77	3595.27	0.38	40.92	0.42	45.23	1850.98	0.40	43.08	0.40	43.08	1855.62	0.39	42.00	0.18	19.38	814.15
18	0.38	40.92	0.50	53.85	2203.55	0.42	45.23	0.40	43.08	1948.40	0.40	43.08	0.40	43.08	1855.62	0.40	43.08	0.12	12.92	556.69
19	0.30	32.31	0.60	64.62	2087.57	0.56	60.31	0.30	32.31	1948.40	0.45	48.46	0.55	59.23	2870.41	0.30	32.31	0.11	11.85	382.72
20	0.36	38.77	0.50	53.85	2087.57	0.59	63.54	0.54	58.15	3695.01	0.34	36.62	0.28	30.15	1104.09	0.40	43.08	0.11	11.85	510.30
21	0.62	66.77	0.53	57.08	3810.98	0.30	32.31	0.50	53.85	1739.64	0.36	38.77	0.35	37.69	1461.30	0.35	37.69	0.20	21.54	811.83
22	0.50	53.85	0.50	53.85	2899.41	0.49	52.77	0.41	44.15	2329.96	0.40	43.08	0.40	43.08	1855.62	0.32	34.46	0.10	10.77	371.12
23	0.40	43.08	0.50	53.85	2319.53	0.52	56.00	0.40	43.08	2412.31	0.40	43.08	0.40	43.08	1855.62	0.40	43.08	0.15	16.15	695.86
24	0.39	42.00	0.56	60.31	2532.92	0.35	37.69	0.35	37.69	1420.71	0.40	43.08	0.40	43.08	1855.62	0.36	38.77	0.12	12.92	501.02
25	0.40	43.08	0.60	64.62	2783.43	0.43	46.31	0.51	54.92	2543.36	0.42	45.23	0.45	48.46	2191.95	0.40	43.08	0.20	21.54	927.81
Suma	1191.08			1540.00	72963.02		1135.08		1178.15	53361.86		1085.54		1055.38	46078.55		930.46		408.15	15139.35
Promedio	47.64			61.60	2918.52		45.40		47.15	2134.47		43.42		42.22	1963.14		37.22		16.33	605.58
D.E. (σ)	9.04			7.32	558.03		10.51		8.39	616.26		3.15		6.36	362.41		4.57		4.56	175.83

Promedio del área de las células del haz: 2918.52 micras cuadradas 342.64 células/mm cuadrados
 Promedio del área de las células del envés: 2134.47 micras cuadradas 468.50 células/mm cuadrados
 El promedio de las células del haz es 1.37 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.03 veces el promedio del ancho.
 El promedio de las células subsidiarias es 2.28 veces el promedio del ancho.

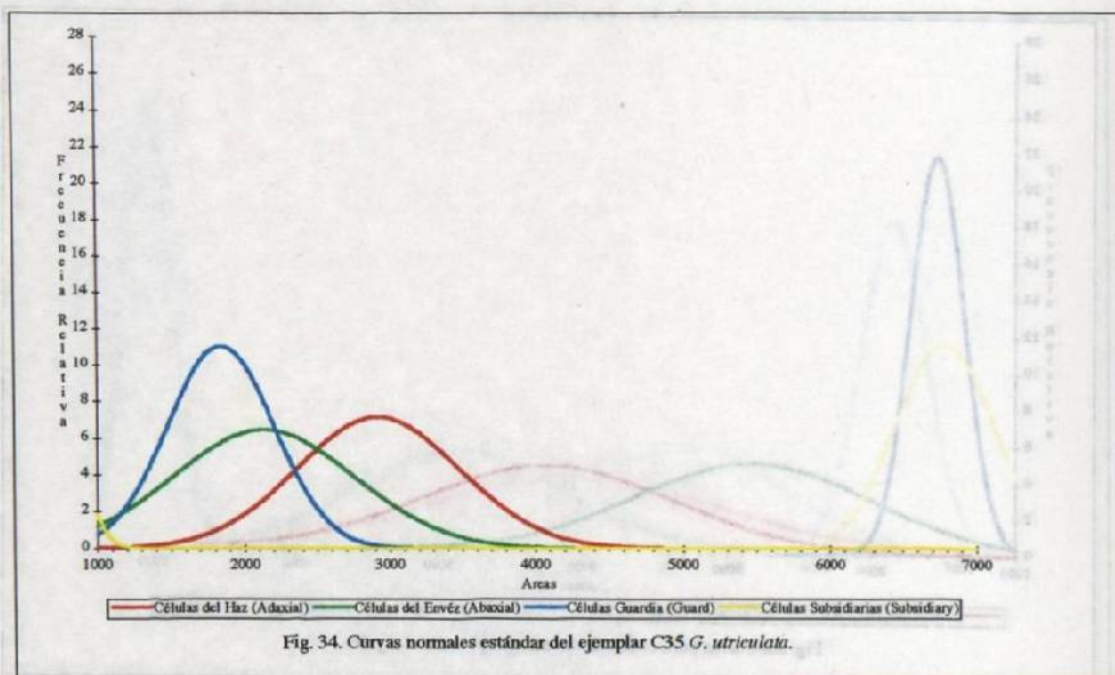


Fig. 34. Curvas normales estándar del ejemplar C35 *G. utriculata*.

Cuadro 35. Datos estadísticos de C36 *Spiranthes sp. ign.*

C36 *Spiranthes sp. ign.* (NLSI) Pta230796.3 Méx: NLI: en la barranca acerca de camino: km/20 W. Cola Caballo; N25 22.462' W 100 12.066'

#	Células del haz (Axial Cells)					Células del envés (Abaxial Cells)					Células Guardia (Guard Cells)					Células Subsidiarias (Subsidiary Cells)				
	Largo (Lh)		Ancho (Ah)		Área	Largo (Le)		Ancho (Ae)		Área	Largo (Lg)		Ancho (Ag)		Área	Largo (Ls)		Ancho (As)		Área
	Indice	μ_m	Indice	μ_m		Indice	μ_m	Indice	μ_m		Indice	μ_m	Indice	μ_m		Indice	μ_m	Indice	μ_m	
1	1.03	110.92	0.98	105.54	11706.65	0.75	80.77	0.42	45.23	3653.25	0.45	48.46	0.36	38.77	1878.82	0.50	53.85	0.18	19.38	1043.79
2	1.10	118.46	0.90	96.92	11481.66	0.96	103.38	0.54	58.15	6012.21	0.45	48.46	0.36	38.77	1878.82	0.50	53.85	0.18	19.38	1043.79
3	1.00	107.69	0.80	86.15	9278.11	0.90	96.92	0.69	74.31	7202.13	0.45	48.46	0.36	38.77	1878.82	0.54	58.15	0.28	30.15	1758.56
4	0.99	106.62	0.90	96.92	10333.49	1.00	107.69	0.78	84.00	9046.15	0.45	48.46	0.36	38.77	1878.82	0.45	48.46	0.20	21.54	1043.79
5	1.00	107.69	0.85	91.54	9837.99	1.00	107.69	0.62	66.77	7190.53	0.40	43.08	0.35	37.69	1623.67	0.45	48.46	0.20	21.54	1043.79
6	1.11	119.54	0.85	91.54	10942.37	0.67	72.15	0.56	60.31	4351.43	0.42	45.23	0.35	37.69	1704.85	0.61	65.69	0.22	23.69	1556.40
7	1.08	116.31	0.88	94.77	11022.39	0.80	86.15	0.62	66.77	5752.43	0.38	40.92	0.35	37.69	1542.48	0.57	61.38	0.40	43.08	2644.26
8	0.90	96.92	0.72	77.54	7515.27	0.95	102.31	0.73	78.62	8042.96	0.45	48.46	0.40	43.08	2087.57	0.40	43.08	0.19	20.46	891.42
9	0.89	95.85	0.89	95.85	9186.48	1.08	116.31	0.66	71.08	8266.79	0.40	43.08	0.32	34.46	1484.50	0.47	50.62	0.20	21.54	1090.18
10	1.02	109.85	0.70	75.38	8280.71	0.85	91.54	0.85	91.54	8379.29	0.40	43.08	0.35	37.69	1623.67	0.55	59.23	0.39	42.00	2487.69
11	0.89	95.85	0.84	90.46	8670.39	0.78	84.00	0.70	75.38	6332.31	0.40	43.08	0.32	34.46	1484.50	0.52	56.00	0.18	19.38	1085.54
12	0.82	88.31	0.82	88.31	7798.25	0.92	99.08	0.65	70.00	6953.38	0.40	43.08	0.32	34.46	1484.50	0.50	53.85	0.30	32.31	1739.64
13	1.45	156.15	0.98	105.54	16480.23	0.69	74.31	0.69	74.31	5521.63	0.39	42.00	0.32	34.46	1447.38	0.57	61.38	0.30	32.31	1983.19
14	1.30	140.00	0.86	92.62	12966.15	0.76	81.85	0.70	75.38	6169.94	0.42	45.23	0.35	37.69	1704.85	0.69	74.31	0.30	32.31	2400.71
15	0.98	105.54	0.71	76.46	8069.63	0.72	77.54	0.78	84.00	6513.23	0.42	45.23	0.35	37.69	1704.85	0.60	64.62	0.30	32.31	2087.57
16	1.61	173.38	0.80	86.15	14937.75	0.56	60.31	0.56	60.31	3467.02	0.41	44.15	0.35	37.69	1664.26	0.65	70.00	0.36	38.77	2713.85
17	1.43	154.00	1.05	113.08	17413.84	0.79	85.08	0.60	64.62	5407.28	0.42	45.23	0.33	35.54	1607.43	0.51	54.92	0.25	26.92	1478.70
18	0.95	102.31	0.80	86.15	8814.20	0.80	86.15	0.69	74.31	6401.89	0.47	50.62	0.34	36.62	1853.30	0.52	56.00	0.18	19.38	1085.54
19	1.20	129.23	1.01	108.77	14056.33	0.72	77.54	0.82	88.31	6847.24	0.49	52.77	0.31	33.38	1761.68	0.60	64.62	0.28	30.15	1948.40
20	1.45	156.15	1.05	113.08	17657.39	0.78	84.00	0.72	77.54	6513.23	0.45	48.46	0.31	33.38	1617.87	0.77	82.92	0.15	16.15	1339.53
21	1.10	118.46	0.90	96.92	11481.66	0.76	81.85	0.66	71.08	5817.37	0.44	47.38	0.33	35.54	1683.98	0.72	77.54	0.25	26.92	2087.57
22	1.64	176.62	1.08	116.31	20541.72	0.90	96.92	0.55	59.23	5740.83	0.39	42.00	0.37	39.85	1673.54	0.62	66.77	0.30	32.31	2157.16
23	1.50	161.54	0.70	75.38	12177.51	0.87	93.69	0.42	45.23	4237.77	0.49	52.77	0.38	40.92	2159.48	0.50	53.85	0.20	21.54	1159.76
24	1.02	109.85	0.85	91.54	10055.15	0.70	75.38	0.58	62.46	4708.64	0.50	53.85	0.38	40.92	2203.55	0.49	52.77	0.21	22.62	1193.40
25	1.00	107.69	0.80	86.15	9278.11	0.80	86.15	0.57	61.38	5288.52	0.42	45.23	0.34	36.62	1656.14	0.60	64.62	0.21	22.62	1461.30
Suma		3064.92		2339.08	290003.41		2208.77		1740.31	154059.46		1158.77		932.62	43280.32		1496.92		668.77	40510.53
Promedio		122.60		93.56	11600.14		88.35		69.61	6162.38		46.35		37.30	1511.57		59.88		26.75	1620.42
D.E. (σ)		25.85		11.76	3470.34		13.08		11.70	1423.13		3.63		2.47	204.57		9.55		7.48	572.02

Promedio del área de las células del haz: 11600.14 micras cuadradas 86.21 células/mm cuadrados
 Promedio del área de las células del envés: 6162.38 micras cuadradas 162.28 células/mm cuadrados
 El promedio de las células del haz es 1.88 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.24 veces el promedio del ancho.
 El promedio de las células subsidiarias es 2.24 veces el promedio del ancho.

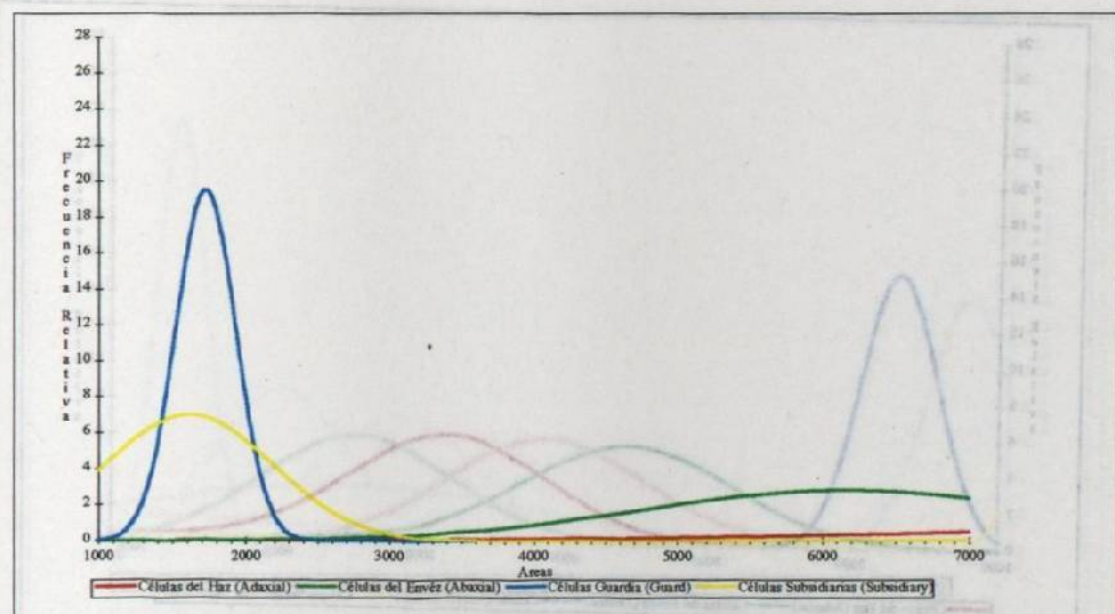


Fig. 35. Curvas normales estándar del ejemplar C36 *Spiranthes sp. ign.*

Cuadro 36. Datos estadísticos de G37 *G. superba*.

C37 *Governia superba* (NLSI) P#230796-4 México; NL: pared de la barranca acerca del camino; km#s 20 W. Cola Caballo; N 25 22.462; W 100 12.060

#	Células del haz (Adaxial Cells)			Células del envés (Abaxial Cells)			Células Guardia (Guard Cells)			Células Subsidiarias (Subsidiary Cells)										
	Largo (Lh)	Ancho (Ah)	Área (A _h)	Largo (Lc)	Ancho (Ac)	Área (A _c)	Largo (Lg)	Ancho (Ag)	Área (A _g)	Largo (La)	Ancho (Aa)	Área (A _a)								
	Indice (μ _h)	Indice (μ _a)	Indice (μ _h)	Indice (μ _c)	Indice (μ _a)	Indice (μ _c)	Indice (μ _g)	Indice (μ _a)	Indice (μ _g)	Indice (μ _a)	Indice (μ _a)	Indice (μ _a)								
1	0.60	64.62	0.88	94.77	6123.55	0.70	75.38	0.49	52.77	3977.99	0.49	52.77	0.38	40.92	2159.48	0.45	48.46	0.10	10.77	521.89
2	0.64	68.92	0.84	90.46	6234.89	0.35	37.69	0.60	64.62	2435.50	0.45	48.46	0.35	37.69	1826.63	0.48	51.69	0.10	10.77	556.69
3	0.65	70.00	0.68	73.25	5126.15	0.35	37.69	0.60	64.62	2435.50	0.45	48.46	0.35	37.69	1826.63	0.40	43.08	0.06	6.46	278.34
4	0.64	68.92	0.72	77.54	5344.19	0.67	72.15	0.51	54.92	3962.91	0.38	40.92	0.30	32.31	1322.13	0.40	43.08	0.06	6.46	278.34
5	0.57	61.38	0.72	77.54	4759.67	0.45	48.46	0.55	59.23	2870.41	0.46	49.54	0.36	38.77	1920.57	0.42	45.23	0.08	8.62	389.68
6	0.57	61.38	0.70	75.38	4627.45	0.61	65.69	0.55	59.23	3891.01	0.48	51.69	0.33	35.54	1837.06	0.45	48.46	0.06	6.46	313.14
7	0.65	70.00	0.67	72.15	5050.77	0.55	59.23	0.55	59.23	3508.28	0.42	45.23	0.32	34.46	1558.72	0.45	48.46	0.07	7.54	365.33
8	0.65	70.00	0.70	75.38	5276.92	0.62	66.77	0.55	59.23	3954.79	0.41	44.15	0.31	33.38	1474.06	0.41	44.15	0.11	11.85	525.05
9	0.79	85.08	0.55	59.23	5039.17	0.60	64.62	0.50	53.85	3479.29	0.41	44.15	0.31	33.38	1474.06	0.45	48.46	0.04	4.31	208.76
10	0.58	62.46	0.53	57.08	3565.11	0.39	42.00	0.56	60.31	2532.92	0.40	43.08	0.30	32.31	1391.72	0.45	48.46	0.04	4.31	208.76
11	0.62	66.77	0.58	62.46	4170.51	0.52	56.00	0.54	58.15	3256.61	0.44	47.38	0.35	37.69	1786.04	0.38	40.92	0.01	1.08	44.07
12	0.78	84.00	0.54	58.15	4884.92	0.61	65.69	0.60	64.62	4244.73	0.40	43.08	0.31	33.38	1438.11	0.38	40.92	0.10	10.77	440.71
13	0.70	75.38	0.60	64.62	4871.01	0.71	76.46	0.50	53.85	4117.16	0.44	47.38	0.32	34.46	1632.95	0.42	45.23	0.10	10.77	487.10
14	0.70	75.38	0.63	67.85	5114.56	0.60	64.62	0.50	53.85	3479.29	0.38	40.92	0.29	31.23	1278.06	0.42	45.23	0.06	6.46	292.26
15	0.70	75.38	0.65	70.00	5276.92	0.46	49.54	0.42	45.23	2240.66	0.46	49.54	0.34	36.62	1813.87	0.48	51.69	0.08	8.62	445.35
16	0.76	81.85	0.56	60.31	4935.95	0.44	47.38	0.56	60.31	2857.66	0.45	48.46	0.40	43.08	2087.57	0.43	46.31	0.16	17.23	797.92
17	0.50	53.85	0.52	56.00	3015.38	0.80	86.15	0.56	60.31	5195.74	0.47	50.62	0.37	39.85	2016.83	0.48	51.69	0.12	12.92	668.02
18	0.69	74.31	0.60	64.62	4801.42	0.70	75.38	0.50	53.85	4059.17	0.39	42.00	0.33	35.54	1492.62	0.42	45.23	0.11	11.85	535.81
19	0.70	75.38	0.57	61.38	4627.45	0.73	78.62	0.50	53.85	4233.14	0.43	46.31	0.32	34.46	1595.83	0.40	43.08	0.10	10.77	463.91
20	0.80	86.15	0.57	61.38	5288.52	0.45	48.46	0.58	62.46	3026.98	0.39	42.00	0.29	31.23	1311.69	0.42	45.23	0.08	8.62	389.68
21	0.82	88.31	0.47	50.62	4469.73	0.50	53.85	0.55	59.23	3189.35	0.43	46.31	0.35	37.69	1745.44	0.32	34.46	0.23	24.77	850.59
22	0.80	86.15	0.56	60.31	5195.74	0.62	66.77	0.60	64.62	4314.32	0.46	49.54	0.40	43.08	2133.96	0.46	49.54	0.20	21.54	1066.98
23	0.72	77.54	0.55	59.23	4592.66	0.54	58.15	0.68	73.23	4258.65	0.40	43.08	0.40	43.08	1855.62	0.47	50.62	0.12	12.92	654.11
24	0.81	87.23	0.46	49.54	4321.28	0.70	75.38	0.45	48.46	3653.25	0.45	48.46	0.35	37.69	1826.63	0.39	42.00	0.20	21.54	904.62
25	0.72	77.54	0.50	53.85	4175.15	0.87	93.69	0.40	43.08	4035.98	0.42	45.23	0.31	33.38	1510.01	0.35	37.69	0.21	22.62	852.43
Suma	1848.00		1633.08		120889.07		1563.85		1443.08	89211.30		1158.77		908.92	42316.28		1139.38		280.00	12540.52
Promedio	73.92		66.12		4895.36		62.63		57.72	3568.45		46.35		36.36	1672.65		45.58		11.20	501.62
D.E. (σ)	9.33		11.35		683.75		14.76		6.61	732.37		3.41		3.63	263.20		4.37		6.10	248.74

Promedio del área de las células del haz: 4895.36

micras cuadradas 206.80 células/mm cuadrados

Promedio del área de las células del envés: 3568.45

micras cuadradas 280.23 células/mm cuadrados

El promedio de las células del haz es

1.36 veces el promedio de las células del envés.

El promedio de las células guardia es

1.27 veces el promedio del ancho.

El promedio de las células subsidiarias es

4.07 veces el promedio del ancho.

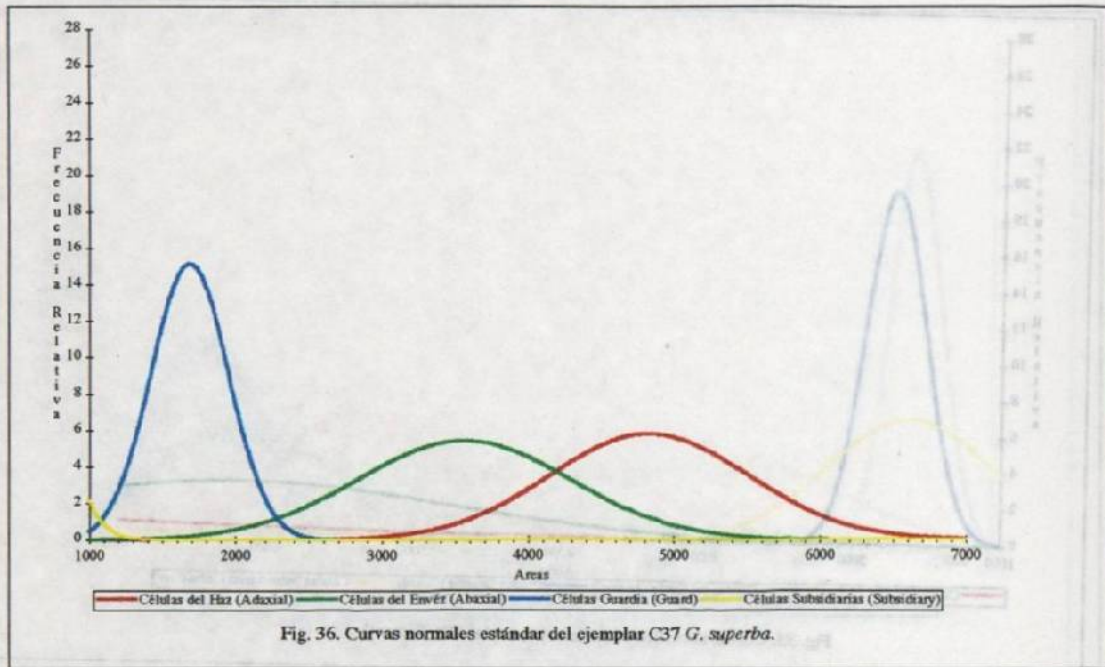


Fig. 36. Curvas normales estándar del ejemplar C37 *G. superba*.

Cuadro 37. Datos estadísticos de C38 *Malaxis corymbosa*.

C38 *Malaxis corymbosa* (NLSI) Pl#230796-5 Méx.; NL.; en la barranca acerca de camino; km#20 W. Cola Caballo; N 25 22.462; W 100 12.069

#	Células del haz (Adaxial Cells)					Células del Envés (Abaxial Cells)					Células Guardia (Guard Cells)					Células Subsidiarias (Subsidiary Cells)						
	Largo (Lh)		Ancho (Ah)		Área	Largo (Lc)		Ancho (Ac)		Área	Largo (Lg)		Ancho (Ag)		Área	Largo (La)		Ancho (As)		Área		
	Indice	μ_m	Indice	μ_m		Indice	μ_m	Indice	μ_m		Indice	μ_m	Indice	μ_m		Indice	μ_m	Indice	μ_m		Indice	μ_m
1	0.65	70.00	0.57	61.38	4296.92	0.51	54.92	0.46	49.54	2720.80	0.32	34.46	0.20	21.54	742.25					0.00	0.00	0.00
2	0.78	84.00	0.48	51.69	4342.15	0.60	64.62	0.46	49.54	3200.95	0.24	25.85	0.20	21.54	556.69					0.00	0.00	0.00
3	0.70	75.38	0.52	56.00	4221.54	0.79	85.08	0.42	45.23	3848.09	0.30	32.31	0.13	14.00	452.31					0.00	0.00	0.00
4	0.70	75.38	0.56	60.31	4546.27	0.60	64.62	0.30	32.31	2087.57	0.30	32.31	0.13	14.00	452.31					0.00	0.00	0.00
5	0.72	77.54	0.50	53.85	4175.15	0.50	53.85	0.38	40.92	2203.55	0.21	22.62	0.11	11.85	267.91					0.00	0.00	0.00
6	0.69	74.31	0.49	52.77	3921.16	0.50	53.85	0.48	51.69	2783.43	0.30	32.31	0.20	21.54	695.86					0.00	0.00	0.00
7	0.71	76.46	0.49	52.77	4034.82	0.56	60.31	0.37	39.85	2403.08	0.25	26.92	0.16	17.23	463.91					0.00	0.00	0.00
8	0.74	79.69	0.51	54.92	4376.95	0.35	37.69	0.35	37.69	1420.71	0.29	31.23	0.20	21.54	672.66					0.00	0.00	0.00
9	0.64	68.92	0.64	68.92	4750.39	0.40	43.08	0.40	43.08	1855.62	0.31	33.38	0.20	21.54	719.05					0.00	0.00	0.00
10	0.69	74.31	0.50	53.85	4001.18	0.51	54.92	0.42	45.23	2484.21	0.31	33.38	0.18	19.38	647.15					0.00	0.00	0.00
11	0.72	77.54	0.50	53.85	4175.15	0.38	40.92	0.38	40.92	1674.70	0.26	28.00	0.12	12.92	361.85					0.00	0.00	0.00
12	0.80	86.15	0.45	48.46	4175.15	0.53	57.08	0.31	33.38	1905.49	0.28	30.15	0.21	22.62	681.94					0.00	0.00	0.00
13	0.48	51.69	0.60	64.62	3340.12	0.59	63.54	0.38	40.92	2600.19	0.30	32.31	0.20	21.54	695.86					0.00	0.00	0.00
14	0.47	50.62	0.55	59.23	2997.99	0.70	75.38	0.40	43.08	3247.34	0.28	30.15	0.20	21.54	649.47					0.00	0.00	0.00
15	0.72	77.54	0.57	61.38	4759.67	0.50	53.85	0.36	38.77	2087.57	0.30	32.31	0.21	22.62	730.65					0.00	0.00	0.00
16	0.75	80.77	0.56	60.31	4871.01	0.48	51.69	0.42	45.23	2338.08	0.25	26.92	0.19	20.46	550.89					0.00	0.00	0.00
17	0.74	79.69	0.47	50.62	4033.66	0.79	85.08	0.40	43.08	3664.85	0.20	21.54	0.09	9.69	208.76					0.00	0.00	0.00
18	0.68	73.23	0.38	40.92	2996.83	0.52	56.00	0.46	49.54	2774.15	0.29	31.23	0.21	22.62	706.30					0.00	0.00	0.00
19	0.52	56.00	0.38	40.92	2291.69	0.72	77.54	0.40	43.08	3340.12	0.30	32.31	0.20	21.54	695.86					0.00	0.00	0.00
20	0.70	75.38	0.50	53.85	4059.17	0.49	52.77	0.48	51.69	2727.76	0.30	32.31	0.22	23.69	765.44					0.00	0.00	0.00
21	0.50	53.85	0.50	53.85	2899.41	0.54	58.15	0.42	45.23	2630.34	0.24	25.85	0.19	20.46	528.85					0.00	0.00	0.00
22	0.56	60.31	0.51	54.92	3312.28	0.62	66.77	0.50	53.85	3595.27	0.21	22.62	0.17	18.31	414.04					0.00	0.00	0.00
23	0.80	86.15	0.50	53.85	4639.05	0.60	64.62	0.42	45.23	2922.60	0.30	32.31	0.19	20.46	661.06					0.00	0.00	0.00
24	0.82	88.31	0.48	51.69	4564.83	0.56	60.31	0.50	53.85	3247.34	0.26	28.00	0.19	20.46	572.92					0.00	0.00	0.00
25	0.73	78.62	0.59	63.54	4995.10	0.59	63.54	0.55	59.23	3763.43	0.21	22.62	0.20	21.54	487.10					0.00	0.00	0.00
Suma	1831.85		1378.46	100777.62		1500.15		1122.15	67527.21		733.38		484.62	14381.06		0.00				0.00	0.00	0.00
Promedio	73.27		55.14	4051.10		60.01		44.89	2701.09		29.34		19.38	575.23		0.00				0.00	0.00	0.00
D.E. (σ)	10.75		6.50	690.40		11.90		6.42	671.25		3.95		3.83	153.08		0.00				0.00	0.00	0.00

Promedio del área de las células del haz: 4031.10 micras cuadradas 248.07 células/mm cuadrados
 Promedio del área de las células del envés: 2701.09 micras cuadradas 370.22 células/mm cuadrados
 El promedio de las células del haz es 1.49 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.51 veces el promedio del ancho.
 El promedio de las células subsidiarias es ### veces el promedio del ancho.

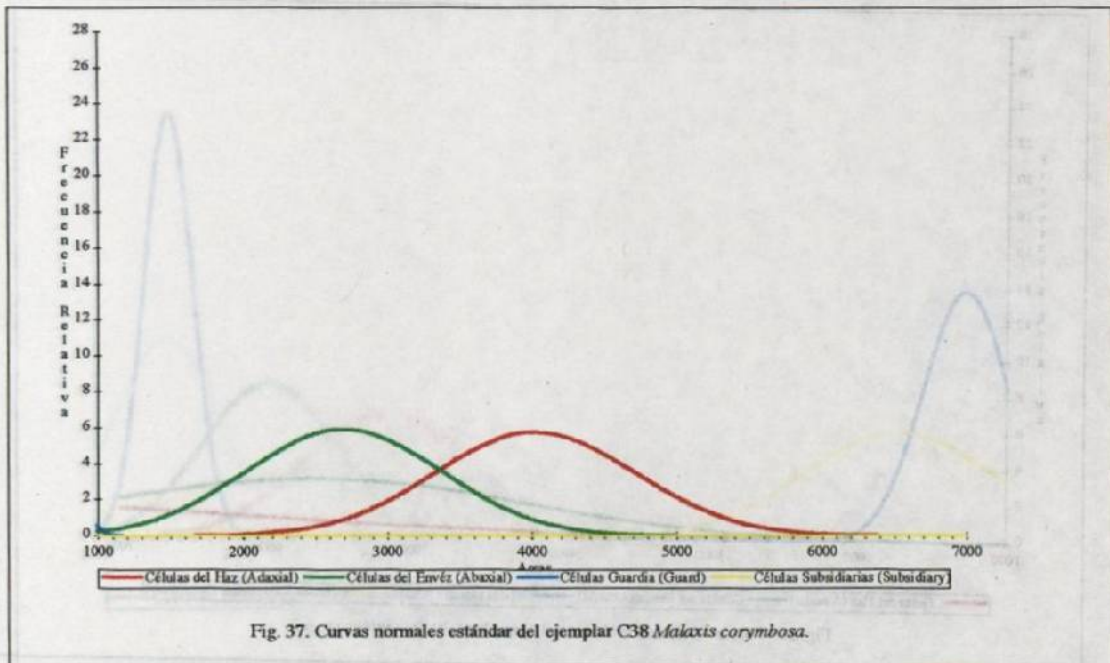


Fig. 37. Curvas normales estándar del ejemplar C38 *Malaxis corymbosa*.

Cuadro 38. Datos estadísticos de C39 *Spiranthes sp. ign.*

C39 *Spiranthes sp. ign.* (NLSI) P#300796.1; México; NL; en la barranca aerea de camino; km# 20 W. Cola Caballo; N 25 22' 46.2"; W 100 12' 06.6"; elevación ca. 1550m

#	Células del Haz (Adaxial Cells)			Células del Envés (Abaxial Cells)			Células Guardia (Guard Cells)			Células Subsidiarias (Subsidiary Cells)										
	Largo (Lh)		Ancho (Ah)	Largo (Le)		Ancho (Ae)	Largo (Lg)		Ag (Ag)	Largo (La)		Ancho (As)	Area							
	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	Indice	μ_m	μ_m							
1	0.74	79.69	1.00	107.69	8582.25	0.78	84.00	0.70	75.38	6332.31	0.40	43.08	0.34	36.62	1577.28	0.6	64.62	0.22	23.69	1530.89
2	1.29	138.92	0.90	96.92	13464.85	0.49	52.77	0.79	85.08	4489.44	0.40	43.08	0.35	37.69	1623.67	0.42	45.23	0.24	25.85	1169.04
3	0.88	94.77	1.06	114.15	10818.27	0.80	86.15	0.52	56.00	4824.61	0.44	47.38	0.31	33.38	1581.92	0.72	77.54	0.3	32.31	2505.09
4	0.86	92.62	0.90	96.92	8976.57	0.84	90.46	0.62	66.77	6040.05	0.44	47.38	0.30	32.31	1530.89	0.6	64.62	0.2	21.54	1391.72
5	1.00	107.69	0.90	96.92	10437.87	0.79	85.08	0.60	64.62	5497.28	0.44	47.38	0.30	32.31	1530.89	0.36	38.77	0.25	26.92	1043.79
6	0.72	77.54	0.70	75.38	5845.21	0.70	75.38	0.64	68.92	5195.74	0.40	43.08	0.32	34.46	1484.50	0.42	45.23	0.2	21.54	974.20
7	0.82	88.31	0.70	75.38	6657.04	0.99	106.62	0.50	53.85	5740.83	0.40	43.08	0.29	31.23	1345.33	0.5	53.85	0.29	31.23	1681.66
8	1.15	123.85	0.80	86.15	10669.82	0.80	86.15	0.70	75.38	6494.67	0.40	43.08	0.29	31.23	1345.33	0.3	32.31	0.3	32.31	1043.79
9	0.90	96.92	1.00	107.69	10437.87	0.60	64.62	0.60	64.62	4175.15	0.39	42.00	0.30	32.31	1356.92	0.5	53.85	0.23	24.77	1333.73
10	0.83	89.38	0.80	86.15	7700.83	0.61	65.69	0.49	52.77	3466.53	0.50	53.85	0.25	26.92	1449.70	0.7	75.38	0.3	32.31	2435.50
11	1.25	134.62	0.86	92.62	12467.45	0.75	80.77	0.60	64.62	5218.93	0.50	53.85	0.22	23.69	1275.74	0.54	58.15	0.36	38.77	2254.58
12	0.90	96.92	0.70	75.38	7306.51	0.70	75.38	0.68	73.23	5520.47	0.40	43.08	0.30	32.31	1391.72	0.31	33.38	0.19	20.46	683.10
13	1.18	127.08	0.90	96.92	12316.68	0.98	105.54	0.48	51.69	5455.53	0.40	43.08	0.31	33.38	1438.11	0.55	59.23	0.22	23.69	1403.31
14	1.10	118.46	0.89	95.85	11354.08	0.69	74.31	0.69	74.31	5521.63	0.41	44.15	0.31	33.38	1474.06	0.51	54.92	0.22	23.69	1301.25
15	1.00	107.69	0.80	86.15	9278.11	0.85	91.54	0.80	86.15	7886.39	0.35	37.69	0.30	32.31	1217.75	0.75	80.77	0.39	42.00	3392.31
16	0.79	85.08	0.79	85.08	7238.08	0.82	88.31	0.98	105.54	9319.86	0.38	40.92	0.26	28.00	1145.85	0.59	63.54	0.4	43.08	2737.04
17	1.20	129.23	0.99	106.62	13777.99	0.83	89.38	0.80	86.15	7700.83	0.39	42.00	0.28	30.15	1266.46	0.56	60.31	0.3	32.31	1948.40
18	0.90	96.92	0.70	75.38	7306.51	0.80	86.15	0.70	75.38	6494.67	0.40	43.08	0.30	32.31	1391.72	0.6	64.62	0.3	32.31	2087.57
19	0.80	86.15	0.85	91.54	7886.39	0.59	63.54	0.70	75.38	4789.82	0.36	38.77	0.28	30.15	1169.04	0.66	71.08	0.3	32.31	2296.33
20	1.00	107.69	0.70	75.38	8118.34	0.69	74.31	0.65	70.00	5201.54	0.40	43.08	0.29	31.23	1345.33	0.5	53.85	0.34	36.62	1971.60
21	0.70	75.38	0.70	75.38	5682.84	0.50	53.85	0.71	76.46	4117.16	0.40	43.08	0.30	32.31	1391.72	0.49	52.77	0.3	32.31	1704.83
22	1.10	118.46	0.80	86.15	10205.92	0.65	70.00	0.75	80.77	5653.85	0.30	32.31	0.22	23.69	765.44	0.64	68.92	0.29	31.23	2152.52
23	0.80	86.15	0.71	76.46	6587.45	0.64	68.92	0.85	91.54	6309.11	0.30	32.31	0.20	21.54	695.86	0.55	59.23	0.3	32.31	1913.61
24	0.80	86.15	0.60	64.62	5566.86	0.60	64.62	0.47	50.62	3270.53	0.30	32.31	0.20	21.54	695.86	0.39	42.00	0.29	31.23	1311.69
25	0.80	86.15	0.60	64.62	5566.86	0.78	84.00	0.60	64.62	5427.69	0.30	32.31	0.19	20.46	661.06	0.35	37.69	0.21	22.62	852.43
Suma	2531.85		2191.54	224250.64		1967.54		1789.85	140144.62		1055.38		754.92	32152.11		1411.85		747.38	43119.99	
Promedio	101.27		87.66	8970.06		78.70		71.59	5650.79		42.22		30.20	1296.28		56.47		29.90	1724.80	
D.E. (σ)	18.89		13.57	2513.52		13.84		13.40	1347.42		5.73		4.68	286.99		13.42		6.27	657.99	

Promedio del área de las células del haz: 8970.06 micras cuadradas
 Promedio del área de las células del envés: 5605.78 micras cuadradas
 El promedio de las células del haz es 1.60 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.40 veces el promedio del ancho.
 El promedio de las células subsidiarias es 1.89 veces el promedio del ancho.

111.48 células/mm cuadrados
 178.39 células/mm cuadrados
 Note: 4 Las células subsidiarias lateral a las células guardia son más pequeñas que las a las apices de las células guardia, por este razón las medidas aquí son medias de ambos.

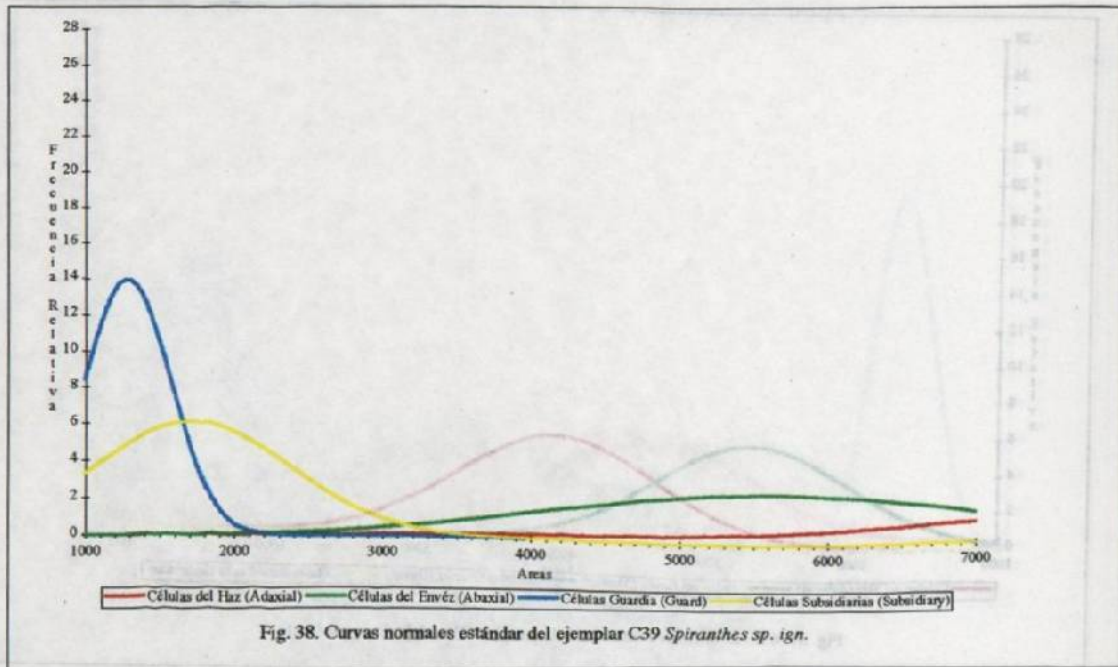


Fig. 38. Curvas normales estándar del ejemplar C39 *Spiranthes sp. ign.*

Cuadro 39. Datos estadísticos de C45 *S. saccata*.

C45 *S. saccata* (Méx) P#300996-1 El Salvador y norte incl. Guatemala y México (I)

#	Células del Haz (Abaxial Cells)						Células del Envés (Abaxial Cells)						Células Guardia (Guard Cells)						Células Subsidiarias (Subsidiary Cells)					
	Largo (Lh)		Ancho (Ah)		Área (µm²)	Indice	Largo (Le)		Ancho (Ae)		Área (µm²)	Indice	Largo (Lg)		Ancho (Ag)		Área (µm²)	Indice	Largo (Ls)		Ancho (As)		Área (µm²)	Indice
	Indice	µm	Indice	µm			Indice	µm	Indice	µm			Indice	µm	Indice	µm			Indice	µm	Indice	µm		
1	0.71	76.46	0.30	32.31	2470.30	0.58	62.46	0.30	32.31	2017.99	0.45	48.46	0.32	34.46	1670.06	0.70	75.38	0.52	56.00	4221.54				
2	0.60	64.62	0.28	30.15	1948.40	0.75	80.77	0.30	32.31	2609.47	0.47	50.62	0.27	29.08	1471.74	0.35	37.69	0.30	32.31	1217.73				
3	0.80	86.15	0.32	34.46	2968.99	0.50	53.85	0.37	39.85	2145.56	0.45	48.46	0.22	23.69	1148.17	0.60	64.62	0.40	43.08	2783.43				
4	0.75	80.77	0.38	40.92	3305.32	0.80	86.15	0.28	30.15	2597.87	0.50	53.85	0.30	32.31	1739.64	0.60	64.62	0.25	26.92	1739.64				
5	0.70	75.38	0.40	43.08	3247.34	0.50	53.85	0.42	45.23	2435.50	0.48	51.69	0.28	30.15	1558.72	0.70	75.38	0.38	40.92	3084.97				
6	0.60	64.62	0.35	37.69	2435.50	0.45	48.46	0.30	32.31	1565.68	0.48	51.69	0.30	32.31	1670.06	0.68	73.23	0.70	75.38	5520.47				
7	0.52	56.00	0.45	48.46	2713.85	0.70	75.38	0.40	43.08	3247.34	0.45	48.46	0.30	32.31	1565.68	0.65	70.00	0.38	40.92	2864.61				
8	0.71	76.46	0.45	48.46	3705.44	0.62	66.77	0.38	40.92	2732.40	0.48	51.69	0.30	32.31	1670.06	0.60	64.62	0.28	30.15	1948.40				
9	0.85	91.54	0.40	43.08	3943.19	0.50	53.85	0.40	43.08	2319.53	0.48	51.69	0.30	32.31	1670.06	0.58	62.46	0.28	30.15	1883.46				
10	0.75	80.77	0.40	43.08	3479.29	0.45	48.46	0.48	51.69	2505.09	0.46	49.54	0.28	30.15	1493.77	0.50	53.85	0.25	26.92	1449.70				
11	0.65	70.00	0.40	43.08	3015.38	0.40	43.08	0.45	48.46	2087.57	0.42	45.23	0.28	30.15	1363.88	0.60	64.62	0.28	30.15	1948.40				
12	0.62	66.77	0.45	48.46	3233.74	0.58	62.46	0.40	43.08	2690.65	0.45	48.46	0.30	32.31	1565.68	0.70	75.38	0.30	32.31	2435.50				
13	0.65	70.00	0.48	51.69	3618.46	0.35	37.69	0.40	43.08	1623.67	0.45	48.46	0.32	34.46	1670.06	0.70	75.38	0.50	53.85	4059.17				
14	0.56	60.31	0.38	40.92	2467.98	0.60	64.62	0.28	30.15	1948.40	0.46	49.54	0.30	32.31	1600.47	0.78	84.00	0.42	45.23	3799.38				
15	0.65	70.00	0.40	43.08	3015.38	0.55	59.23	0.38	40.92	2423.90	0.50	53.85	0.32	34.46	1855.62	0.68	73.23	0.52	56.00	4100.92				
16	0.75	80.77	0.40	43.08	3479.29	0.35	37.69	0.40	43.08	1623.67	0.45	48.46	0.28	30.15	1461.30	0.42	45.23	0.40	43.08	1948.40				
17	0.65	70.00	0.30	32.31	2261.54	0.60	64.62	0.52	54.46	2226.75	0.45	48.46	0.28	30.15	1461.30	0.58	62.46	0.28	30.15	1883.46				
18	0.55	59.23	0.40	43.08	2551.48	0.55	59.23	0.40	43.08	2551.48	0.45	48.46	0.30	32.31	1565.68	0.62	66.77	0.30	32.31	2157.16				
19	0.78	84.00	0.40	43.08	3618.46	0.50	53.85	0.40	43.08	2319.53	0.45	48.46	0.22	23.69	1148.17	0.60	64.62	0.28	30.15	1948.40				
20	0.74	79.69	0.48	51.69	4119.48	0.42	45.23	0.38	40.92	1850.98	0.45	48.46	0.28	30.15	1461.30	0.50	53.85	0.22	23.69	1275.74				
21	0.70	75.38	0.40	43.08	3247.34	0.50	53.85	0.30	32.31	1739.64	0.42	45.23	0.30	32.31	1461.30	0.50	53.85	0.22	23.69	1275.74				
22	0.58	62.46	0.46	49.54	3094.25	0.45	48.46	0.55	59.23	2870.41	0.40	43.08	0.28	30.15	1298.93	0.50	53.85	0.38	40.92	2203.55				
23	0.70	75.38	0.38	40.92	3084.97	0.70	75.38	0.28	30.15	2273.14	0.40	43.08	0.30	32.31	1391.72	0.65	70.00	0.40	43.08	3015.38				
24	0.48	51.69	0.35	37.69	1948.40	0.68	73.23	0.25	26.92	1971.60	0.48	51.69	0.30	32.31	1670.06	0.52	56.00	0.50	53.85	3015.38				
25	0.68	73.23	0.42	45.23	3312.28	0.38	40.92	0.28	30.15	1233.99	0.45	48.46	0.28	30.15	1461.30	0.62	66.77	0.50	53.85	3595.27				
Suma	1801.69		1058.62	76288.06		1449.54		980.00	55611.80	11.38	1225.54	7.21	776.46	38094.74		1607.85		995.08	65375.85					
Promedio	72.07		42.34	3051.32		57.98		39.20	2224.47	0.46	49.02	0.29	31.06	1523.70		64.31		39.80	2615.03					
D.E. (σ)	9.80		5.82	581.20		13.25		7.86	467.09	0.03	2.80	0.02	2.67	170.33		10.61		12.80	1103.68					

Promedio del área de las células del haz: 3051.52 micras cuadradas 327.71 células/mm cuadrados
 Promedio del área de las células del envés: 2224.47 micras cuadradas 449.54 células/mm cuadrados
 El promedio de las células del haz es 1.37 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.58 veces el promedio del ancho.
 El promedio de las células subsidiarias es 1.62 veces el promedio del ancho.

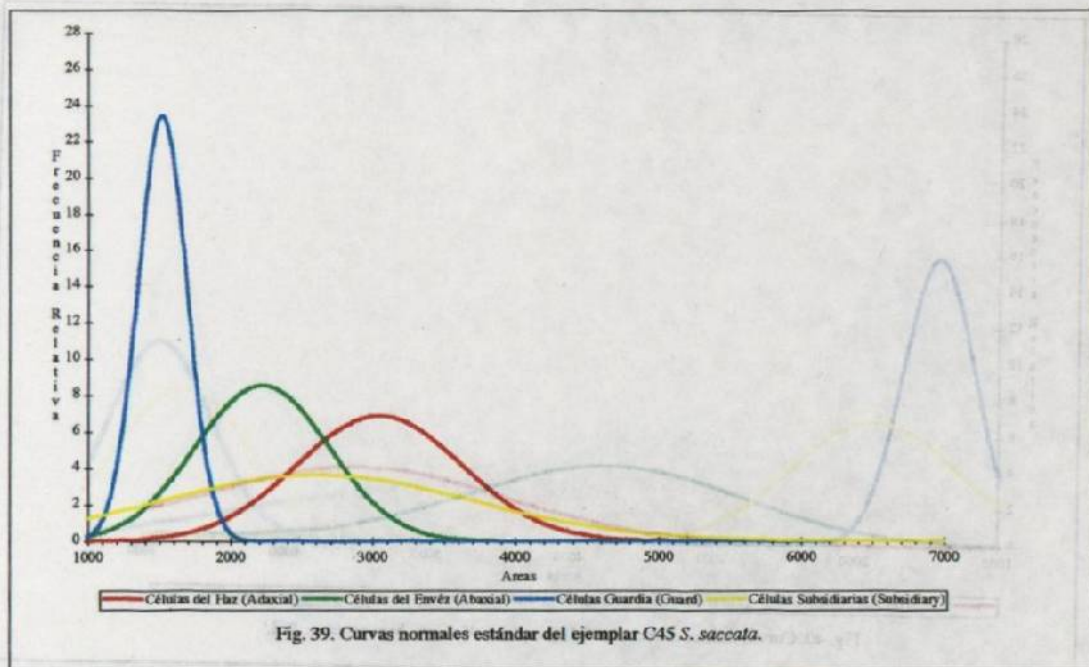


Fig. 39. Curvas normales estándar del ejemplar C45 *S. saccata*.

Cuadro 41. Datos estadísticos de C47 *S. embreei*.

C47 *S. embreei* (Fdr) P1#500996-3 Ecuador (I)

#	Células del Haz (Adaxial Cells)					Células del Envés (Abaxial Cells)					Células guardia (Guard Cells)					Células Subsidiarias (Subsidiary Cells)				
	Largo (Lh)		Ancho (Ah)		Área (µm²)	Largo (Le)		Ancho (Ae)		Área (µm²)	Largo (Lg)		Ancho (Ag)		Área (µm²)	Largo (La)		Ancho (Aa)		Área (µm²)
	Indice	µm	Indice	µm		Indice	µm	Indice	µm		Indice	µm	Indice	µm		Indice	µm	Indice	µm	
1	0.80	86.15	0.69	74.31	6401.89	0.60	64.62	0.56	60.31	3896.80	0.42	45.23	0.31	33.38	1510.01	0.36	38.77	0.39	42.00	1628.31
2	0.70	75.38	0.59	63.54	4789.82	0.40	43.08	0.49	52.77	2273.14	0.45	48.46	0.31	33.38	1617.87	0.31	33.38	0.31	33.38	1114.53
3	0.72	77.54	0.70	75.38	5845.21	0.45	48.46	0.51	54.92	2661.66	0.43	46.31	0.41	44.15	2044.66	0.41	44.15	0.32	34.46	1521.61
4	0.72	77.54	0.65	70.00	5427.69	0.50	53.85	0.50	53.85	2899.41	0.35	37.69	0.31	33.38	1258.34	0.40	43.08	0.22	23.69	1020.59
5	0.60	64.62	0.51	54.92	3548.88	0.68	73.23	0.55	59.23	4337.51	0.45	48.46	0.38	40.92	1983.19	0.37	39.85	0.31	33.38	1330.25
6	0.80	86.15	0.69	74.31	6401.89	0.90	96.92	0.60	64.62	6262.72	0.50	53.85	0.45	48.46	2609.47	0.40	43.08	0.30	32.31	1391.72
7	0.60	64.62	0.62	66.77	4314.32	0.60	64.62	0.50	53.85	3479.29	0.42	45.23	0.38	40.92	1850.98	0.46	49.54	0.30	32.31	1600.47
8	0.70	75.38	0.85	91.54	6900.59	0.60	64.62	0.60	64.62	4175.15	0.40	43.08	0.35	37.69	1623.67	0.48	51.69	0.31	33.38	1725.73
9	0.90	96.92	0.60	64.62	6262.72	0.70	75.38	0.55	59.23	4465.09	0.40	43.08	0.30	32.31	1391.72	0.45	48.46	0.33	35.54	1722.25
10	0.62	66.77	0.70	75.38	5033.37	0.40	43.08	0.42	45.23	1948.40	0.48	51.69	0.33	35.54	1837.06	0.39	42.00	0.35	37.69	1583.08
11	0.70	75.38	0.60	64.62	4871.01	0.75	80.77	0.48	51.69	4175.15	0.40	43.08	0.35	37.69	1623.67	0.35	37.69	0.30	32.31	1217.75
12	0.80	86.15	0.73	78.62	6773.02	0.48	51.69	0.49	52.77	2727.76	0.45	48.46	0.25	26.92	1304.73	0.47	50.62	0.30	32.31	1695.27
13	0.70	75.38	0.65	70.00	5276.92	0.70	75.38	0.58	62.46	4708.64	0.46	49.54	0.25	26.92	1333.73	0.55	59.23	0.49	52.77	3125.56
14	0.80	86.15	0.58	62.46	5381.30	0.32	34.46	0.50	53.85	1855.62	0.40	43.08	0.30	32.31	1391.72	0.50	53.85	0.38	40.92	2203.55
15	0.70	75.38	0.65	70.00	5276.92	0.49	52.77	0.50	53.85	2841.42	0.41	44.15	0.25	26.92	1188.76	0.50	53.85	0.35	37.69	2029.59
16	0.85	91.54	0.79	85.08	7787.81	0.60	64.62	0.58	62.46	4035.98	0.40	43.08	0.30	32.31	1391.72	0.48	51.69	0.50	53.85	2783.43
17	0.90	96.92	0.60	64.62	6262.72	0.45	48.46	0.45	48.46	2348.52	0.49	52.77	0.28	30.15	1591.20	0.55	59.23	0.30	32.31	1913.61
18	0.60	64.62	0.64	68.92	4453.49	0.52	56.00	0.51	54.92	3075.69	0.48	51.69	0.25	26.92	1391.72	0.40	43.08	0.30	32.31	1391.72
19	0.51	54.92	0.58	62.46	3430.58	0.50	53.85	0.40	43.08	2319.53	0.41	44.15	0.22	23.69	1046.11	0.47	50.62	0.30	32.31	1635.27
20	0.53	59.23	0.48	51.69	3061.77	0.91	98.00	0.68	73.23	7176.61	0.36	38.77	0.25	26.92	1043.79	0.50	53.85	0.31	33.38	1797.63
21	0.62	66.77	0.58	62.46	4170.51	0.70	75.38	0.48	51.69	3896.80	0.38	40.92	0.22	23.69	969.56	0.40	43.08	0.33	35.54	1530.89
22	0.65	70.00	0.71	76.46	5352.31	0.50	53.85	0.53	57.08	3073.37	0.40	43.08	0.30	32.31	1391.72	0.43	46.31	0.35	37.69	1745.44
23	0.70	75.38	0.55	59.23	4465.09	0.42	45.23	0.50	53.85	2435.50	0.41	44.15	0.28	30.15	1331.41	0.39	42.00	0.30	32.31	1356.92
24	0.75	80.77	0.65	70.00	5653.85	0.32	34.46	0.38	40.92	1410.27	0.48	51.69	0.31	33.38	1725.73	0.40	43.08	0.31	33.38	1438.11
25	0.81	87.23	0.60	64.62	5636.45	0.52	56.00	0.50	53.85	3015.38	0.40	43.08	0.28	30.15	1298.93	0.39	42.00	0.31	33.38	1402.15
Suma	1916.92		1722.00	132780.12		1508.77		1382.77	85495.42	10.63	1144.77	7.62	820.62	37751.45		1164.15		890.62	41845.41	
Promedio	76.68		68.88	5311.38		60.35		55.31	3419.29	0.43	45.79	0.30	32.82	1510.06		46.57		35.62	1673.82	
D.E. (σ)	11.17		8.87	1145.81		16.88		7.11	1340.46	0.04	4.34	0.06	6.20	361.89		6.66		6.36	471.95	

Promedio del área de las células del haz: 5311.20 micras cuadradas 188.28 células/mm cuadrados
 Promedio del área de las células del envés: 3419.29 micras cuadradas 292.41 células/mm cuadrados
 El promedio de las células del haz es 1.55 veces el promedio de las células del envés.
 El promedio de las células guardia es 1.40 veces el promedio del ancho.
 El promedio de las células subsidiarias es 1.31 veces el promedio del ancho.

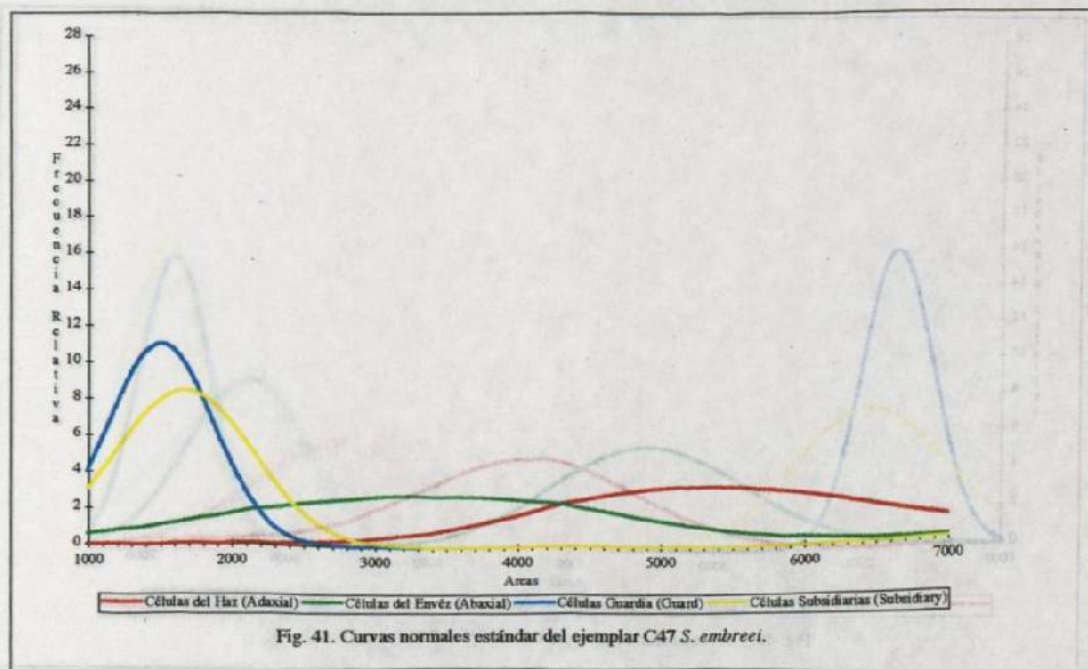


Fig. 41. Curvas normales estándar del ejemplar C47 *S. embreei*.