

Supplementary Table 1. Mean fossil leaf stomatal density (SD) and index (SI) data from the Sorthat Formation, Bornholm, Denmark.

Mesofossil ID	Taxonomy	Depth (m)	Mean SD	SD σ	Mean SI	SI σ
kl76w2	Coniferales	25.2	47	8.33	7.63	2.59
kl76w3	Coniferales	25.2	44	14.42	7.93	3.67
kl76w5	Coniferales	25.2	43	6.11	7.76	1.87
kl76w6	Coniferales	25.2	100	1.00	n.d.	n.d.
kl76w7	Coniferales	25.2	40	10.58	n.d.	n.d.
kl76w8	Coniferales	25.2	45	15.14	8.37	3.65
kl76w10	Coniferales	25.2	55	8.33	9.48	1.54
KL75 (2)	Pagiophyllum	25.45	64	10.58	n.d.	n.d.
KL75 (2A)	Pagiophyllum	25.45	92	11.31	6.73	3.69
kl73w3	Cyparissidium	26.45	75	26.63	10.58	3.13
KL71(1)	Coniferales	26.7	103	13.98	10.92	0.44
KL71 (1)	Pagiophyllum	26.5	76	31.39	7.20	
kl70w1	Coniferales	26.7	76	17.44	10.16	2.05
kl68w2	Coniferales	27.2	71	14.05	9.31	1.33
kl68w3	Coniferales	27.2	59	2.31	8.72	0.93
kl66w3	Coniferales	27.2	63	22.03	9.71	3.10
kl66w1	Coniferales	27.7	65	23.44	6.99	2.70
kl66w2	Coniferales	27.7	71	19.73	9.68	3.58
KL65 (1)	Coniferales	27.95	61	50.13	12.54	2.14
KL65 (2)	Coniferales	27.95	64	12.73	7.76	0.00
KL65 (4)	Coniferales	27.95	77	18.20	3.42	0.04
kl62w1	Coniferales	28.7	48	8.00	8.08	1.12
KL58w2	Coniferales	29.7	34	11.16	4.98	2.57
KL56 (3)	Pagiophyllum	30.2	74	10.04	6.09	n.d.
KL56 (4)	Pagiophyllum	30.2	41	8.25	n.d.	n.d.
KL56 (4)	Pagiophyllum	30.2	47	8.25	5.07	n.d.
KL56 (6)	Brachyphyllum	30.2	60	5.66	n.d.	n.d.
KL54w2	Coniferales	30.7	33	2.31	4.52	0.22
KL54w3	Coniferales	30.7	51	22.03	6.42	3.01
KL53w2	Pagiophyllum	30.95	67	18.04	9.08	1.40
KL53w3	Pagiophyllum	30.95	41	10.07	4.87	0.98
KL36w2	Pagiophyllum	35.2	49	8.33	6.37	1.11
KL36w3	Pagiophyllum	35.2	55	15.14	6.13	1.36
KL34w4	Pagiophyllum	35.7	52	10.58	7.26	0.90
KL34w5	Pagiophyllum	35.7	63	8.33	7.71	0.57
KL33w2	Pagiophyllum	35.95	64	6.32	9.13	1.72
KL31w1	Pagiophyllum	36.45	69	4.62	6.94	0.74
KL31w6	Pagiophyllum	36.45	71	9.24	12.02	2.44
KL29w1	Pagiophyllum	36.95	61	4.62	9.42	0.41
KL29w2	Brachyphyllum	36.95	65	24.11	9.15	3.86
KL28w2	Pagiophyllum	37.2	48	6.93	4.94	1.16
KL28w3	Pagiophyllum	37.2	48	8.00	6.76	1.42
KL28w4	Pagiophyllum	37.2	52	8.00	8.16	0.74
KL25w3	Pteridosperm	37.95	101	8.33	17.20	1.34
KL25w4	Brachyphyllum	37.95	76	20.00	12.04	3.87
KL24w4	Pagiophyllum	38.2	56	10.58	7.68	1.49
KL24 (2)	Pagiophyllum	38.2	103	10.64	9.61	0.93
KL24 (3)	Brachyphyllum	38.2	136	22.91	10.51	0.37
KL22w1	Brachyphyllum	38.7	102	19.18	9.65	2.88
KL21 (2)	Pagiophyllum	38.95	64	22.63	6.86	1.70
KL21w3	Brachyphyllum	38.95	19	8.33	2.30	1.19
KL20 (1)	Pagiophyllum	39.2	48	n.d.	5.53	n.d.
KL13w1	Pagiophyllum	40.95	45	14.38	7.84	1.90
KL13w2	Pagiophyllum	40.95	n.d.	n.d.	5.18	n.d.
KL13 (11)	Pagiophyllum	40.95	118	16.49	4.49	n.d.
KL3 (4)	Pagiophyllum	45	72	n.d.	n.d.	n.d.

KL03w3	Coniferales	45	24	21.17	2.76	2.35
KL03w6	Coniferales	45	9	n.d.	1.50	n.d.
KL33w1	Coniferales	35.95	26	3.58	3.48	0.40
KL58w1	Coniferales	29.7	36	10.58	5.57	1.91
KL76w1	Baeira	25.2	85	11.55	9.72	1.73
kl73w1	Ginkgoales	25.95	81	2.31	11.41	1.06
kl65w1	Ginkgoites	27.95	41	6.11	6.30	1.43
KL53w1	Ginkgoales	30.95	39	4.62	5.06	0.61
KL22w2	Ginkgoites	38.7	84	6.93	9.38	0.09
KL21w2	Ginkgoites	38.95	21	4.62	3.24	1.05
KL20w1	Ginkgoites	39.2	32	0.00	4.06	0.26
KL20w3	Ginkgoites	39.2	37	9.24	4.29	0.77
KL14w6	Ginkgoales	40.7	40	18.33	3.70	1.51
KL13w7	Ginkgoales	40.95	81	9.24	13.14	2.53
kl73w2	Czekanowskiales	25.95	15	6.11	n.d.	n.d.
KL65 (6)	indeterminate	27.95	134	n.d.	11.71	n.d.
KL54w1	Hartzia	30.7	35	6.11	5.07	0.66
KL53w4	Czekanowskia	30.95	32	4.00	3.96	0.24
KL36w1	Czekanowskia	35.2	40	10.58	n.d.	0.00
KL25w1	Czekanowskia	37.95	28	4.00	4.07	0.55
KL24 (4)	indeterminate	38.2	124	20.39	n.d.	n.d.
KL21 (5)	Strap morphotype 1	38.95	77	75.07	10.17	0.00
KL20 (3)	Strap morphotype 1	39.2	n.d.	n.d.	3.70	n.d.
KL13 (16)	Strap morphotype 1	40.95	40	11.31	9.20	3.36
KL13 (17)	Strap morphotype 1	40.95	44	17.44	7.24	2.36
KL13 (6)	Strap morphotype 1	40.95	70	14.14	n.d.	n.d.
KL13 (9)	Strap morphotype 1	40.95	116	n.d.	n.d.	n.d.
KL31w5	Pteridospermae	36.45	103	6.57		0.00
KL22w3	Pteridospermae	38.7	88	4.00	12.77	0.60
KL03w1	Pteridospermae	45	57	18.90		0.00
KL29w3	Pteridospermae	36.95	61	20.13	10.72	3.23
KL25w2	Pteridospermae	37.95	32	4.00	4.07	0.33
kl65w3	Pteridospermae	27.95	63	16.17	n.d.	n.d.
KL65 (5)	Pteridospermae?	27.95	137	21.75	8.61	1.43
KL34w1	Pteridospermae	35.7	115	24.11	17.40	6.27
KL32w1	Pteridospermae	36.2	107	25.66	n.d.	0.00
KL31w3	Sagenopteris	36.45	97	19.88	n.d.	0.00
KL24w2	Pteridospermae	38.2	117	29.80	11.70	3.72
kl76w9	Cycadales	25.2	73	15.14	8.34	0.52
kl76w4	Cycadales	25.2	21	6.11	3.07	0.81
kl70w3	Cycadales	26.7	71	22.03	7.38	3.06
KL53w5	Cycadales	30.95	67	22.03	8.30	2.78
KL34w2	Cycadales	35.7	117	10.73	11.56	0.58
KL32w2	Cycadales	36.2	59	12.86	9.62	1.44
KL31w2	Cycadales	36.45	28	6.93	2.70	0.64
KL31w4	Cycadales	36.45	95	6.11	10.92	0.34
KL28w1	Cycadales	37.2	69	20.53	9.67	2.97
KL28w5	Cycadales	37.2	141	10.07	18.24	2.29
KL24w1	Cycadales	38.2	115	35.90	11.65	5.11
	Cycadales	38.95	29	12.22	4.95	2.53
KL56 (1)	Hairy morphotype2	30.2	94	n.d.	n.d.	n.d.
KL21 (3)	indeterminate	38.95	28	0.00	2.84	0.91
KL20 (2)	indeterminate	39.2	n.d.	n.d.	8.97	0.37
KL13 (1)	indeterminate	40.95	12	n.d.	8.57	n.d.
KL13 (13)	indeterminate	40.95	48	0.00	4.52	0.37
KL13 (14)	indeterminate	40.95	47	8.33	5.77	0.72
KL13 (15)	indeterminate	40.95	128	16.00	n.d.	n.d.
KL13 (2)	indeterminate	40.95	30	2.83	3.47	0.48

KL13 (3)	indeterminate	40.95	42	2.83	5.32	0.54
KL13 (4)	indeterminate	40.95	8	n.d.	0.99	n.d.
KL13 (7)	indeterminate	40.95	100	n.d.	n.d.	n.d.
KL13 (8)	indeterminate	40.95	63	17.68	n.d.	n.d.
KL03w7	indeterminate	45	17	20.00	2.65	3.08
KL3 (A)	Hairy morphotype1	45	16	n.d.	n.d.	n.d.
KL3 (c)	Hairy morphotype1	45	8	n.d.	n.d.	n.d.
KL3 (c)	Hairy morphotype1	45	12	n.d.	n.d.	n.d.
KL3 (d)	Hairy morphotype1	45	56	n.d.	n.d.	n.d.
kl65w2	Indeterminate	27.95	85	10.07	n.d.	n.d.
KL24w3	Indeterminate	38.2	75	8.33	11.30	1.34
KL34w3	Indeterminate	35.7	139	12.22	14.18	0.93
KL22w4	indeterminate	38.7	105	9.24	15.80	1.37