

Supplementary Material: Time-dependent production of the bioactive peptides endolides A and B and the polyketide mariline A from the sponge-derived fungus *Stachylidium bicolor* 293K04

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Figure S1. UV-LC-MS detection chromatograms for the pure chemical family representatives of *S. bicolor* 293K04 isolated secondary metabolites, namely endolides A-B and mariline A₁/A₂.

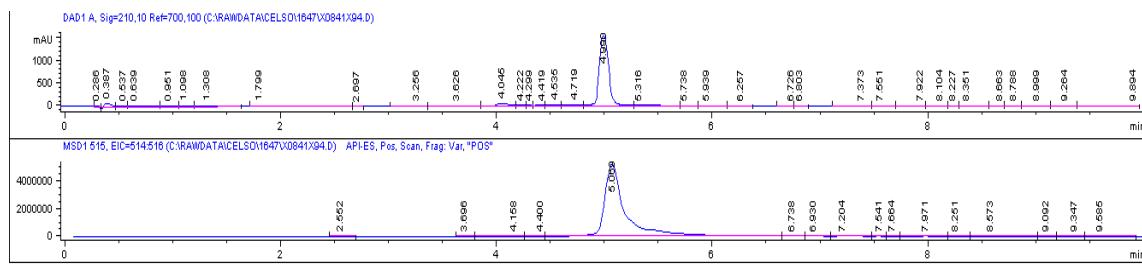


Figure S1.1. UV-LC-MS detection of pure endolide A (above, UV; below, extracted pseudo molecular ion positive mode, Rt 5.0 min.).

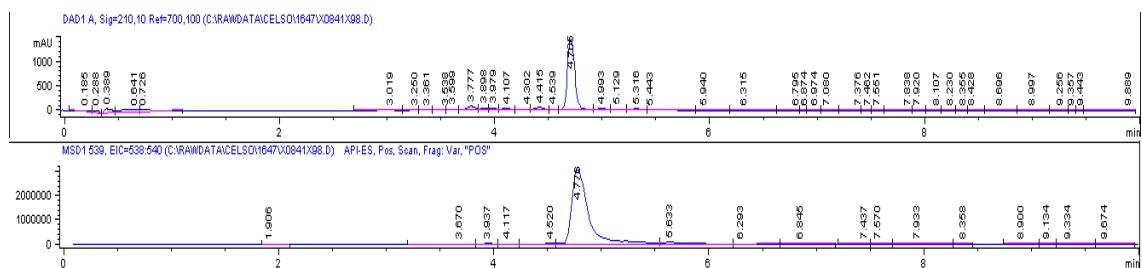


Figure S1.2. UV-LC-MS detection of pure endolide B (above, UV; below, extracted pseudo molecular ion positive mode, Rt 4.7 min.).

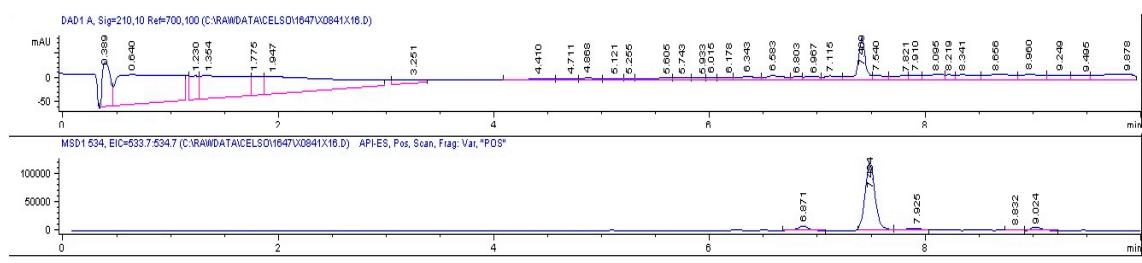


Figure S1.3. UV-LC-MS detection of pure mariline A (above, UV; below, extracted pseudo molecular ion positive mode, Rt 7.4 min, +/-0.1 min.).

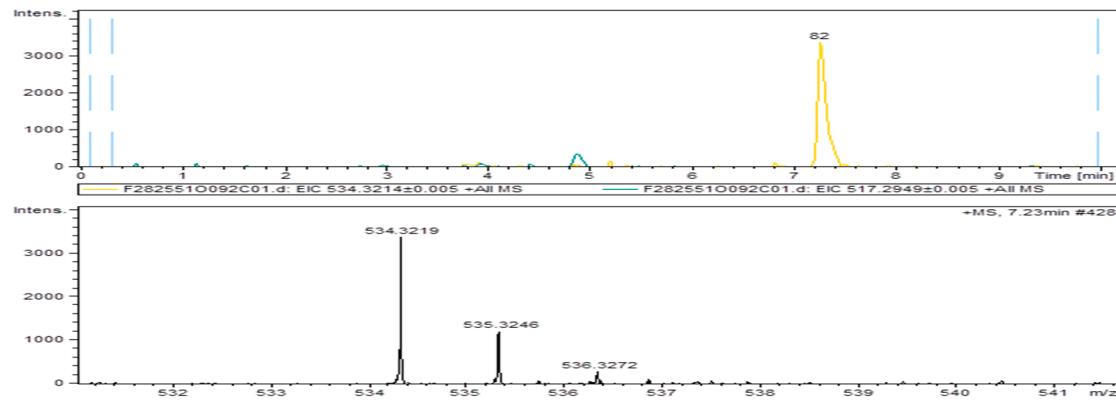


Figure S1.4. UV-LC-HRES-MS detection of mariline A1/A2 in *S. bicolor* 293K04 extracts. Exact mass extracted in pseudo molecular ion positive mode, Rt 7.3 Min; mass found M+H⁺=534.3219)

Table S1. Data from the time course study.

Table S1.1. pH values and average, standard deviations and respective measuring temperatures of pH.

Day	pH	Measuring Temp. pH (°C)
2	5.65	26.3
	5.58	26.4
	5.56	26.3
	5.57	26.3
	5.63	26.7
Average	5.60	26.4
St dev.	0.03	-
5	4.92	26
	4.88	25.8
	4.86	26.1
	4.90	26
	4.89	25.9
Average	4.89	26.0
St dev.	0.02	-
8	4.58	26.1
	4.60	25.9
	4.58	25.8
	4.59	25.8
	4.57	25.8
Average	4.58	25.9
St dev.	0.01	-
12	4.52	26.9
	4.53	26.9
	4.53	26.8
	4.50	26.8
	4.53	26.9
Average	4.52	26.9
St dev.	0.01	-
14	4.54	25.3
	4.53	25.3
	4.55	25.2
	4.55	25.2
	4.55	25.5
Average	4.54	25.3
St dev.	0.01	-
16	4.55	25.8

Day	pH	Measuring Temp. pH (°C)
21	4.43	25.9
	4.42	25.9
	4.42	25.8
	4.44	25.8
	4.40	25.7
Average	4.42	25.8
St dev.	0.01	-
23	4.46	24.5
	4.46	24.5
	4.44	24.8
	4.43	24.8
	4.46	24.7
Average	4.45	24.7
St dev.	0.01	-
26	4.45	25.1
	4.73	25.3
	4.46	25.4
	4.55	25.5
	4.44	25.5
Average	4.53	25.4
St dev.	0.09	-
28	4.48	24.1
	5.33	24.4
	5.38	24.4
	4.53	24
	4.46	24
Average	4.84	24.2
St dev.	0.42	-
33	5.09	25.7
	4.70	25.8
	5.17	25.7
	5.05	25.7
	5.19	25.6
Average	5.04	25.7
St dev.	0.14	-
35	4.66	24.8

	4.55	25.9		5.09	24.8
	4.58	25.8		5.22	24.8
	4.55	25.7		5.29	24.8
	4.55	25.8		5.26	24.8
Average	4.56	-	Average	5.10	24.8
St dev.	0.01		St dev.	0.18	-
	4.32	25.8		5.07	25.2
	4.33	25.8		5.06	25.2
19	4.36	25.8		5.06	25.1
	4.36	25.9		5.06	25.1
	4.37	25.9		5.26	25.4
Average	4.35	25.8	Average	5.10	25.2

Table S1.2. Biomass measurements (gram/330 mL cultivations), its average and standard deviation, including the average pH and pH standard deviation review from Figure S2.1 (data gave rise to Figure 3 in Results).

Day	Weight (biomass at g/300 mL)					Average (biomass at g/L)	stdeV	Average pH	St dev pH
	M1	M2	M3	M4	M5				
0	2.00*	2.00*	2.00*	2.00*	2.00*	6.66*	0*	6.04	0
2	2.40	2.30	2.60	2.20	2.60	8.06	0.595689	5.60	0.0336
5	2.70	2.70	2.40	2.40	2.80	8.66	0.622986	4.89	0.0160
8	2.12	2.40	2.63	1.93	2.23	7.53	0.890238	4.58	0.0088
12	3.29	3.37	3.15	3.11	3.18	10.72	0.357103	4.52	0.0096
14	2.92	2.85	2.95	2.77	2.85	9.55	0.233575	4.54	0.0072
16	3.63	3.36	3.22	3.03	3.60	11.22	0.846829	4.56	0.0096
19	2.62	2.86	2.84	2.49	2.73	9.02	0.516633	4.35	0.0184
21	2.24	2.70	2.71	2.68	2.22	8.36	0.852246	4.42	0.0104
23	2.37	2.03	2.22	2.18	2.23	7.35	0.405522	4.45	0.0120
26	2.28	2.77	2.47	2.58	2.67	8.50	0.629449	4.53	0.0912
28	2.40	2.66	2.65	2.58	2.31	8.39	0.522821	4.84	0.4152
33	1.70	2.23	2.00	2.09	1.76	6.51	0.742597	5.04	0.1360
35	2.21	1.93	2.50	2.40	2.44	7.65	0.771166	5.10	0.1832
37	1.76	2.17	1.40	2.16	1.89	6.25	1.06263	5.10	0.0632

Note: * biomass yield of inoculate (day 0) was not measured (nor the secondary metabolite expression at day 0), and is hereby described as 2 gram/330 mL in order to not affect the comprehension of the graphics.

Table S 1.3. Secondary metabolites: integration of the areas of the respective compounds detected by UV-LC-MS in the time course (data gave rise to Figures 4 and 5 in Results).

Endolide A							
	UV-LC-MS detection (integration values)					Average	stdev
Day	M1	M2	M3	M4	M5	Average	stdev
0	0	0	0	0	0	0	0
2	129964	105651	114824	164958	172085	137496	29729
5	157930	181153	194636	200491	206087	188059	19224
8	285513	240304	264489	239391	300849	266109	27229
12	457940	493581	494542	452780	440180	467805	24826
14	698285	616736	482489	601810	462598	572384	98511
16	614164	662272	590916	564919	584426	603339	37344
19	485749	601067	757810	541774	634286	604137	103003
21	597338	757197	927191	586224	529893	679569	162188
23	906082	763431	636085	595579	764619	733159	122637
26	533135	623826	543552	606812	680142	597493	60544
28	806485	755756	502397	1039810	775581	776006	190914
33	793228	578242	633887	883338	923669	762473	151668
35	608069	895080	502558	532433	516837	610995	163942
37	601450	610801	672638	1093560	717146	739119	203684

Endolide B							
	UV-LC-MS detection (integration values)					Average	stdev
Day	M1	M2	M3	M4	M5	Average	stdev
0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0
12	51659	35396	0	37615	0	24934	23600
14	40103	51469	36020	41345	0	33787	19724
16	36790	49423	51852	41304	43700	44614	6093
19	26745	44635	19681	59427	59343	41966	18318
21	48744	53697	84212	43355	30758	52153	19855
23	80966	57163	47094	57463	66423	61822	12701
26	43636	11554	35179	45524	41046	35388	13882
28	63643	47540	43034	87384	72212	62763	18146
33	71642	45129	34169	57435	89763	59628	21884
35	42314	82851	29140	31706	39564	45115	21781
37	51797	54377	68390	83538	66274	64875	12687

Mariline A ₁ /A ₂							
	UV-LC-MS detection (integration values)					Average	stdev
Day	M1	M2	M3	M4	M5	Average	stdev
0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0
35	0	90993	0	0	0	18199	40693
37	65765	11967	82608	10106	54982	45086	32611

Raw data refers to the integration of the areas of the respective extracted ions in each cultivation extract concentrated two times the initial culture volume, and injected with 2 µL in UV-LC-MS (quintuplicate measurements per time point).

Figure S2. Calibration curves

Figure S2.1. Initial calibration curves for endolides A and mariline A₁/A₂.

Calibration curves for diluted series of pure Endolide A and Mariline A₁/A₂, with 1 μ L injection in UV-LC-MS, ion peaks extracted and respective pseudo molecular ion area recorded:

Concentration	Area of pseudo molecular ion	
	Endolide A, Rt 4.9 min	Mariline A ₁ /A ₂ , Rt 7.4
500 mg/L	54700000	-
250 mg/L	50300000	1839000
125 mg/L	31400000	1332000
72.5 mg/L	27390000	964900
31.25 mg/L	20830000	645600
15.6 mg/L	11220000	371300
7.8 mg/L	7301000	214100
3.9 mg/L	4129000	124200
1.95 mg/L	2890000	68450
0.975 mg/L	1375000	49490
0.5 mg/L	661800	-
0.24 mg/L	407400	-

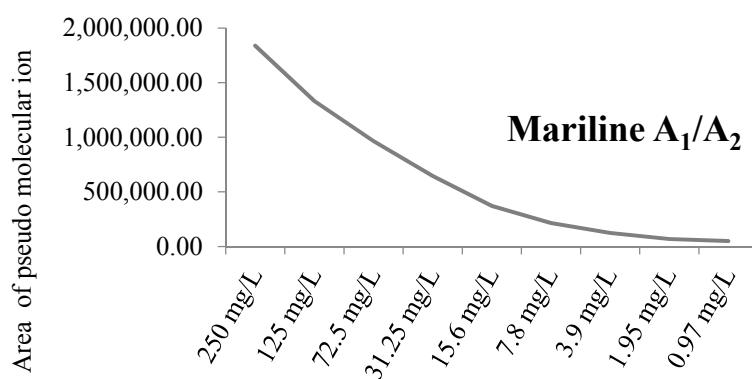
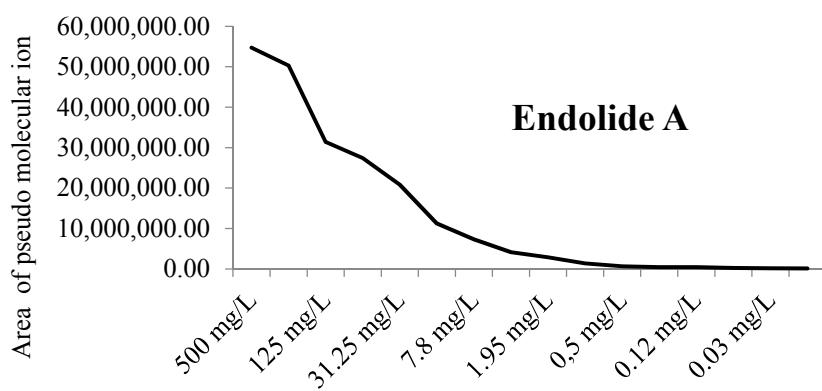
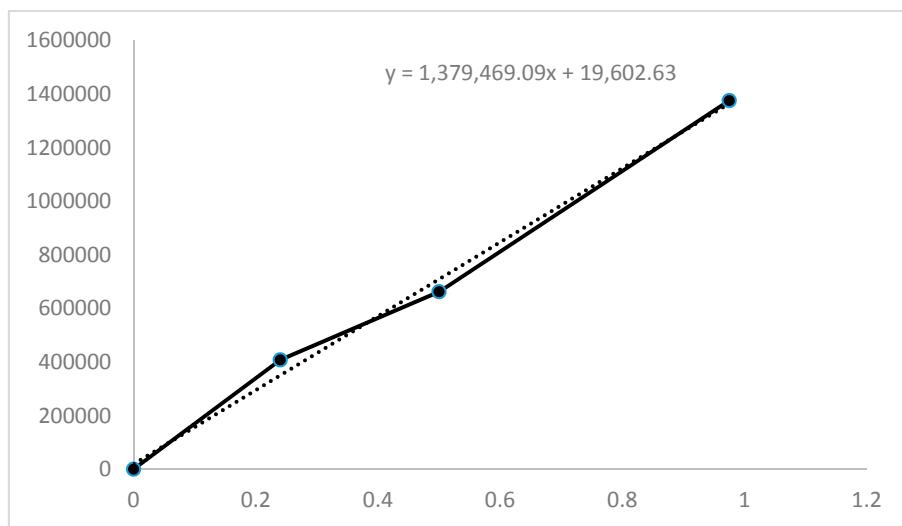


Figure S2.2. Calibration curves adapted to the detected pseudo molecular ion area values of the secondary metabolites in the time course

UV-LC-MS maximal pseudo molecular ion area of endolide A had a value of 776006 (average value at day 28), which ranged in the following calibration values of the pure compound.

Concentration	Endolide A, Rt 4.9 min
0.975 mg/L	1375000
0,5 mg/L	661800
0.24 mg/L	407400
0	0



The pseudo molecular ion area average value at day 28 cannot be directly compared with that of the pure compound, as the first it refers to 2 μ L injection and a 2x concentrated sample, i.e. such value must be divided by 4 for direct comparison with the standard curve (1 μ L injection and "1x" concentrated)

Table S2.2.1. Estimated mg of endolide A with the new calibration curve, with the values normalized

Day	Average Pseudo Molecular Ion Area of Endolide A in the Time Course (2 μ L Injection, 2x Concentrated)	Estimated mg of Endolide A, 2 μ L Injection, 2x Concentrated	Estimated mg of Endolide A, Normalized to 1 μ L Injection and 1x Concentration
0	0	0	0
2	137496	0,08546332	0,02136583
5	188059	0,122117278	0,03052932
8	266109	0,17869702	0,044674255
12	467805	0,324909802	0,081227451
14	572384	0,400720857	0,100180214
16	603339	0,423160651	0,105790163
19	604137	0,423739134	0,105934784
21	679569	0,478421045	0,119605261
23	733159	0,517269326	0,129317332
26	597493	0,418922788	0,104730697
28	776006	0,548329828	0,137082457
33	762473	0,538519532	0,134629883
35	610995	0,428710613	0,107177653
37	739119	0,521589829	0,130397457

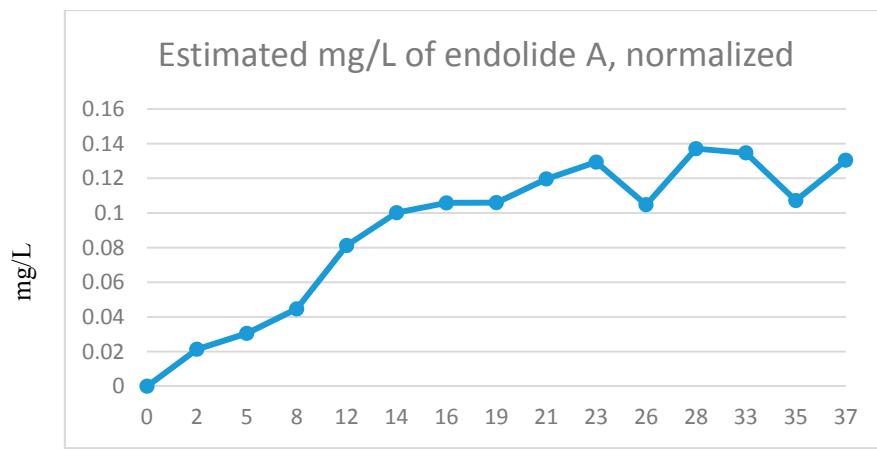


Figure S2.3 Estimated microtiter yield (mg/L) of endolide A in the time course (normalized)

Calibration curve for endolide B was not performed because no pure compound was available. Adapted calibration curve of mariline A₁/A₂ for the values registered in the time course was not possible, as the residual yield values detected in the early production (the pseudo molecular ion area average of day 37 with a value of 45.086), ranged below the most diluted concentration in the mariline A₁/A₂ detectable by LC-MS in the initial calibration curve, i.e. at 0.975 mg/L concentration, the pseudo molecular ion area had a value of 49.490, with the next lower level of concentration registering a non-measurable value of pseudo molecular ion at 0.5 mg/L

1 **Table S2. UV-LC-MS secondary metabolite detection after 8 and 16 days cultivation of**
2 **the *S. bicolor* 293K04 in a nutrient array of 12 culture media.**

3 **Table S2.** UV-LC-MS secondary metabolite detection after 8 and 16 days cultivation of the *S. bicolor* 293K04
4 sp. at 200 rpm (values refer to the integration of the area corresponding to the extracted ion peaks in UV-
5 LC-MS analysis of the cultivation extracts concentrated two times the initial culture volume.

MEDIUM	Endolide A		Endolide B		Marilines, Marilones, Stachylines	
MMK2	8 days	16 days				
	206950	273732				
MALT 2%	442079	1049090				
MV8	4455800	4780600	614564	928657		
YES	887645	487419		95281		
NPF2	487780	581645				
SCY2	184697	210803				
LSFM	276410	316233				
OP26-NLW	264918	251587		112489		
XLA	502108	486697				
XPMK	128101	249634		13597		
Czapek	139622	1653950	167563	252220		
MPY	567354	381883		49423		
BMS		614164				

7 **Table S3. Radial growth rates in the 69-day solid BMS medium time course of *S. bicolor***
8 **293 K04.**

9 **Table S3.1.** Radial growth raw measurements. Optimum temperature growth data; each column beneath
10 "M" (measure) are the Y and X axis where mycelium was measured in 95-mm Petri dishes, each time point
11 in quintuplicate (five measurements).

	TEMP °C	Diameter mm									
		M1		M2		M3		M4		M5	
Day 7	18	8,5	10	8,5	8	9	13	8,5	9	9	10
	20	14	9	13	9	12	10	11	10	14	10
	22	12	11	13	9	10	10	14	10	13	10
	25	15	11	14	12	14	9,5	12	11	11	11
	28	13	8	12	11	9	10	12	9	9	8
	30	8	7	9	7,5	8	6,5	10	8,5	12	7,5
Day 9	Diameter mm										
	TEM °C	M1		M2		M3		M4		M5	
	18	11	12	9	10	10	15	10	10	10	12
	20	15	11	14	11	14	13	12	12	15	11
	22	13	12	15	11	11	12	16	12	15	12
	25	17	13	16	14	16	11	13	13	14	12
Day 12	Diameter mm										
	TEM °C	M1		M2		M3		M4		M5	
	18	12	14	11	11	12	17	12	12	12	14
	20	17	13	17	13	16	14	14	14	18	14
	22	16	15	18	13	15	15	18	15	17	15
	25	19	15	19	19	18	15	15	15	17	14
Day 14	Diameter mm										
	TEM °C	M1		M2		M3		M4		M5	
	18	14	16	13	13	13	18	14	14	14	15
	20	20	15	19	16	18	16	17	16	20	16
	22	18	17	20	15	17	17	20	16	20	17
	25	21	17	20	21	20	16	18	16	19	16
Day 16	Diameter mm										
	TEM °C	M1		M2		M3		M4		M5	
	18	15	18	14	14	19	20	15	16	15	17
	20	21	17	20	17	20	22	20	17	21	17
	22	20	18	21	16	19	19	22	18	21	18
	25	22	18	22	22	21	17	18	17	20	19
Day 19	Diameter mm										
	TEM °C	M1		M2		M3		M4		M5	
	18	17	20	16	16	16	21	17	19	17	19
	20	23	20	22	19	23	20	21	20	23	20
	22	22	21	23	19	21	21	23	19	23	21
	25	25	19	25	25	23	20	20	18	22	20
Day 21	Diameter mm										
	TEM °C	M1		M2		M3		M4		M5	
	18	19	21	17	17	18	23	18	20	18	20

	20	25	20	23	20	24	21	23	22	25	21
	22	24	22	25	20	22	23	25	21	25	22
	25	26	20	26	25	25	20	20	19	23	21
	28	21	19	22	20	18	19	22	18	20	18
	30	16	15	17	15	15	15	19	15	21	14
	Diameter mm										
Day 26	TEM °C	M1		M2		M3		M4		M5	
	18	25	20	20	20	22	21	23	23	22	24
	20	27	22	26	23	27	24	26	25	28	25
	22	26	25	27	22	25	25	27	23	27	25
	25	29	25	30	30	26	25	26	20	26	25
	28	24	21	25	23	20	23	25	22	22	21
	30	20	18	20	18	17	19	21	18	23	22
	Diameter mm										
Day 28	TEM °C	M1		M2		M3		M4		M5	
	18	23	26	22	22	22	27	24	25	24	25
	20	29	22	27	25	28	25	28	27	29	25
	22	28	26	27	27	26	26	28	24	29	26
	25	30	27	32	32	27	27	24	22	27	25
	28	26	23	26	25	27	24	26	23	23	23
	30	20	19	21	19	19	20	23	20	24	17
	Diameter mm										
Day 30	TEM °C	M1		M2		M3		M4		M5	
	18	24	27	23	23	23	28	26	26	24	26
	20	30	22	28	25	29	27	29	27	30	27
	22	29	27	29	25	26	27	30	25	30	27
	25	32	28	34	33	29	27	25	23	29	29
	28	32	25	27	25	23	25	29	24	25	23
	30	22	20	22	20	20	21	23	20	25	19
	Diameter mm										
Day 33	TEM °C	M1		M2		M3		M4		M5	
	18	26	28	25	25	25	29	25	25	26	28
	20	31	25	32	27	30	29	30	29	31	28
	22	33	30	31	26	30	30	32	32	33	29
	25	36	33	32	37	32	30	30	36	32	31
	28	30	27	31	29	27	27	32	32	28	29
	30	23	20	25	22	21	23	24	21	26	20
	Diameter mm										
Day 35	TEM °C	M1		M2		M3		M4		M5	
	18	26	29	26	26	26	31	29	30	28	29
	20	31	23	34	28	31	28	32	30	33	29
	22	33	32	31	27	30	32	34	32	34	31
	25	38	35	39	39	34	31	32	36	35	33
	28	30	29	31	30	28	29	32	29	29	29
	30	25	21	26	23	22	25	25	21	28	21
	Diameter mm										
Day 38	TEM °C	M1		M2		M3		M4		M5	
	18	28	30	28	28	27	31	30	30	28	30
	20	34	27	36	31	32	31	32	31	34	31
	22	35	33	33	31	33	33	35	32	36	32
	25	40	36	40	40	37	35	32	37	37	34
	28	32	30	35	32	30	32	35	30	30	30
	30	25	21	26	25	23	25	26	21	28	22
	Diameter mm										
Day 40	TEM °C	M1		M2		M3		M4		M5	
	18	29	32	29	29	28	32	31	31	29	31
	20	35	27	37	32	33	33	33	31	35	33
	22	38	35	35	33	33	35	36	32	37	33
	25	43	38	43	43	38	38	36	40	39	36

	28	33	33	35	33	32	33	35	32	33	33
	30	25	23	29	26	24	27	27	24	29	23
Diameter mm											
Day 42	TEM °C	M1	M2	M3	M4	M5					
	18	30	33	30	30	29	33	33	33	30	33
	20	36	29	41	36	35	35	35	33	36	35
	22	41	38	38	36	37	37	40	33	38	35
	25	45	40	46	46	39	41	36	43	41	37
	28	36	35	38	35	35	36	39	34	34	34
	30	29	24	30	27	27	30	28	24	32	26
Diameter mm											
Day 44	TEM °C	M1	M2	M3	M4	M5					
	18	30	33	31	31	30	35	34	33	31	34
	20	38	30	42	37	37	36	36	34	39	37
	22	42	39	39	37	38	40	41	36	41	37
	25	46	41	46	48	45	42	39	44	42	40
	28	38	37	40	38	36	38	40	38	36	36
	30	30	26	31	30	27	30	28	25	32	26
Diameter mm											
Day 47	TEM °C	M1	M2	M3	M4	M5					
	18	31	35	32	32	31	37	35	33	32	36
	20	38	31	45	40	40	40	40	37	39	39
	22	45	41	42	39	42	41	43	39	45	40
	25	49	44	47	50	46	45	40	45	44	40
	28	41	40	43	39	40	41	45	40	40	41
	30	31	28	34	32	30	32	30	26	35	29
Diameter mm											
Day 49	TEM °C	M1	M2	M3	M4	M5					
	18	33	35	32	32	32	39	35	35	33	36
	20	39	31	45	40	42	40	41	37	40	40
	22	45	43	42	40	44	42	45	39	46	40
	25	49	45	50	51	49	46	41	48	46	43
	28	41	40	43	41	41	44	45	41	40	41
	30	31	28	35	34	30	35	31	26	35	30
Diameter mm											
Day 52	TEM °C	M1	M2	M3	M4	M5					
	18	33	35	33	33	33	40	35	35	34	37
	20	42	33	48	44	43	43	43	40	44	42
	22	46	43	45	43	45	44	45	42	47	43
	25	51	50	50	53	49	47	41	48	47	47
	28	44	42	46	43	43	45	48	45	44	45
	30	34	31	37	35	33	36	32	28	38	32
Diameter mm											
Day 55	TEM °C	M1	M2	M3	M4	M5					
	18	34	36	35	35	33	42	36	36	35	41
	20	42	34	49	45	46	44	44	41	45	44
	22	50	45	50	46	46	46	49	45	49	45
	25	55	52	53	55	52	49	44	50	47	49
	28	45	45	47	43	45	46	48	45	44	49
	30	34	31	39	37	35	38	33	28	40	35
Diameter mm											
Day 57	TEM °C	M1	M2	M3	M4	M5					
	18	34	37	36	35	36	44	38	40	37	42
	20	43	34	51	47	46	44	44	41	45	44
	22	51	48	51	47	48	49	51	47	50	48
	25	56	53	56	57	55	50	45	53	49	51
	28	45	45	47	44	45	48	50	47	45	50
	30	34	31	40	40	36	38	33	28	41	36
Day 62	Diameter mm										

	TEM °C	M1		M2		M3		M4		M5	
	18	36	38	38	38	39	45	40	42	38	44
	20	45	36	55	50	49	49	50	46	49	46
	22	55	53	56	53	54	55	56	53	56	54
	25	64	59	60	61	61	57	52	54	56	54
	28	46	46	47	44	47	49	50	50	47	52
	30	34	32	43	45	41	45	34	30	45	39
Day 64	Diameter mm										
	TEM °C	M1		M2		M3		M4		M5	
	18	36	39	38	38	39	46	41	43	39	45
	20	46	36	55	50	49	50	50	47	51	47
	22	57	55	59	54	55	56	58	55	57	56
	25	64	60	61	61	61	59	52	62	56	54
	28	46	46	47	44	47	49	53	51	48	52
Day 66	Diameter mm										
	TEM °C	M1		M2		M3		M4		M5	
	18	38	39	40	40	40	46	42	43	41	46
	20	53	38	58	56	51	53	52	51	53	52
	22	57	56	60	56	55	57	59	55	57	56
	25	64	60	61	61	61	59	52	62	56	54
	28	47	47	47	45	49	51	54	51	49	52
Day 69	Diameter mm										
	TEM °C	M1		M2		M3		M4		M5	
	18	39	41	41	41	41	48	44	45	43	47
	20	55	38	61	57	55	56	55	53	55	54
	22	57	57	62	58	57	58	60	56	57	56
	25	64	60	61	61	62	60	52	63	56	54
	28	49	49	47	45	51	52	56	54	50	52
	30	34	32	45	50	44	48	34	30	49	44

13 **Table S3.2. Average growth) rates (S3.2a) and standard deviation values (S3.2b) from Figure 4 in Results (radial growth Vs
14 temperature)**

15 **Table S3.2a.** Average growth rates shown in figure 4 of main manuscript.

TEMP/D. (Days)	D. 7	D. 9	D. 12	D. 14	D. 16	D. 19	D. 21	D. 26	D. 28	D. 30	D. 33	D. 35	D. 38	D. 40	D. 42	D. 44	D. 47	D. 49	D. 52	D. 55	D. 57	D. 62	D. 64	D. 66	D. 69
18	9,35	11	12,7	14,4	16,3	17,8	19,1	22	24	25	26,2	28	29	30,1	31,4	32,2	33,4	34,2	34,8	36,3	37,9	39,8	40,4	41,5	43
20	11,1	13	15	17,3	19,2	21,1	22,4	25,3	26,5	27,4	29,2	29,9	31,9	32,9	35,1	36,6	38,9	39,5	42,2	43,4	43,9	47,5	48,1	51,7	53,9
22	11,1	13	15,7	17,7	19,2	21,3	22,9	25,2	26,7	27,5	30,6	31,6	33,3	34,7	37,3	39	41,7	42,6	44,3	47,1	49	54,5	56,2	56,8	57,8
25	11,9	14	16,6	18,6	18,8	20,8	22,5	26,2	27,3	28,9	32,9	33,3	36,8	39,4	41,4	43,3	45	46,8	48,3	50,6	52,5	57,8	59	59	59,3
28	10,1	12	13,8	15,4	16,6	18,2	19,7	22,6	24,6	25,8	29,2	29,6	31,6	33,2	35,6	37,7	41	41,7	44,5	45,7	46,6	47,8	48,3	49,2	50,5
30	8,4	9,7	10,9	12,4	13,4	14,9	16,2	19,6	20,2	21,2	22,5	23,7	24,2	25,7	27,7	28,5	30,7	31,5	33,6	35	35,7	38,8	39,2	39,3	41

16 **Table S3.2b.** Standard deviation values shown in figure 4 of main manuscript for the growth rates for the average values of the quintuplicate measures in the
17 X and Y axis.

TEMP/D. (Days)	D. 7	D. 9	D. 12	D. 14	D. 16	D. 19	D. 21	D. 26	D. 28	D. 30	D. 33	D. 35	D. 38	D. 40	D. 42	D. 44	D. 47	D. 49	D. 52	D. 55	D. 57	D. 62	D. 64	D. 66	D. 69
18	0,99	1,3	1,38	1,16	1,76	1,56	1,52	1,4	1,4	1,6	1,28	1,6	1,2	1,3	1,6	1,6	1,88	1,8	1,6	2,08	2,48	2,36	2,68	2,2	2,4
20	1,52	1,4	1,6	1,56	1,76	1,32	1,6	1,5	1,8	1,8	1,6	2,32	1,7	1,74	1,72	2,08	2,14	2,3	2,36	2,64	2,74	3,4	3,28	3,02	3,36
22	1,42	1,5	1,24	1,44	1,44	1,16	1,5	1,24	1,1	1,6	1,6	1,48	1,22	1,56	1,7	1,6	1,7	2	1,3	1,92	1,4	1,1	1,24	1,2	1,36
25	1,42	1,5	1,8	1,8	1,8	2,3	2,5	2,08	2,42	2,52	2,08	2,24	2,04	2,28	2,88	2,5	2,4	2,6	2,3	2,8	3	3,2	3	3	3,18
28	1,52	1,4	1,24	1,4	1,48	1,56	1,3	1,4	1,4	2,12	1,64	0,92	1,6	0,72	1,32	1,16	1,2	1,38	1,3	1,44	1,8	1,96	2,36	2,24	2,5
30	1,18	1,4	1,66	2	1,68	1,88	1,68	1,6	1,48	1,44	1,7	2,1	1,96	1,9	2,1	2,1	2,1	2,6	2,4	2,8	3,36	5,04	5,36	5,44	6,8

18 Values show the average of the Y and X values per "M" and between the quintuplicate measures M1-M5, each with a X/Y average)