

Table S2. Frequency predictions of sectors encompassing between one and four pinnae, for all the variants on models tested

Model	Number of pinnae	Order	Proportion with one pinna	Proportion with two pinnae	Proportion with three pinnae	Proportion with four pinnae	Proportion with five pinnae	Within confidence?	Difference
Observed			0.6458	0.1927	0.1302	0.0156	0.0104		
5A	2	N/A	0.6422	0.3362	0.0139	0.0073	0.0003	YNNYN	1.1032e+03
5A	4	N/A	0.6487	0.1728	0.0055	0.1618	0.0053	YYNNY	1.2758e+03
5B	2	N/A	0.6447	0.3335	0.0143	0.0068	0.0004	YNNYN	1.0485e+03
5B	3	N/A	0.6442	0.1218	0.2200	0.0076	0.0022	YNNYN	5.2456e+02
5B	4	N/A	0.6508	0.0913	0.0824	0.1642	0.0055	YNNNY	1.3241e+03
5C	2	N/A	0.6901	0.2904	0.0134	0.0055	0.0005	YNNNN	7.5779e+02
5C	3	N/A	0.6796	0.1102	0.1969	0.0078	0.0078	YNNYN	4.7624e+02
5C	4	N/A	0.6745	0.0864	0.0795	0.1487	0.0059	YNNNY	1.2188e+03
5D	2	P+R	0.6495	0.3298	0.0129	0.0073	0.0003	YNNYN	1.0264e+03
5D	3	P+R	0.5431	0.2274	0.2143	0.0071	0.0038	NYNYY	8.5583e+02
5D	4	P+R	0.4880	0.1688	0.1704	0.1614	0.0045	NYNYN	2.0943e+03
5D	2	R+P	0.4876	0.4838	0.0134	0.0142	0.0005	NNNNN	4.4886e+03
5D	3	R+P	0.4290	0.2240	0.3277	0.0069	0.0048	NYNYY	3.4364e+03
5D	4	R+P	0.4118	0.1673	0.1641	0.2403	0.0046	NYNYN	4.3022e+03
5E	2	P+R	0.6495	0.3300	0.0135	0.0065	0.0002	YNNYN	1.0092e+03
5E	3	P+R	0.5338	0.2317	0.2193	0.0066	0.0042	NYNYY	9.7736e+02
5E	4	P+R	0.4852	0.1709	0.1694	0.1628	0.0045	NYNYN	2.1874e+03
5E	2	R+P	0.5551	0.4199	0.0137	0.0107	0.0005	NNNNN	2.5488e+03
5E	3	R+P	0.4893	0.2037	0.2891	0.0082	0.0040	NYNYY	2.0125e+03
5E	4	R+P	0.4528	0.1532	0.1556	0.2230	0.0052	NYNYN	3.4266e+03
5B + 2	3	N/A	0.7263	0.0991	0.1637	0.0071	0.0013	NNYYN	5.8604e+02
5D + 1	3	P+R	0.6454	0.1771	0.1650	0.0071	0.0029	YYYYN	1.3536e+02
5D + 1	3	R+P	0.5663	0.1754	0.2430	0.0075	0.0031	NYNYY	5.8604e+02

Columns show the model of cell division corresponding to diagrams in Fig. 5. For examination of whether later divisions of final products shown in Fig. 5B,D occur, additional numbers of cell divisions are denoted in the last three rows.

'Number of pinnae', final number of pinnae set to arise from each merophyte; 'Order', the order of specification of cells becoming pinnae and rachis segments; 'P+R', pinna specified first; 'R+P', rachis specified first; proportion with one to five pinnae, the proportionate frequency of sectors expected under the set parameters; 'Within confidence?', statements of whether the observed data fall within 95% confidence intervals of the predictions for each sector size; Y, yes; N, no; 'Difference', total sum of the squared difference between predicted and observed data for all sector sizes.