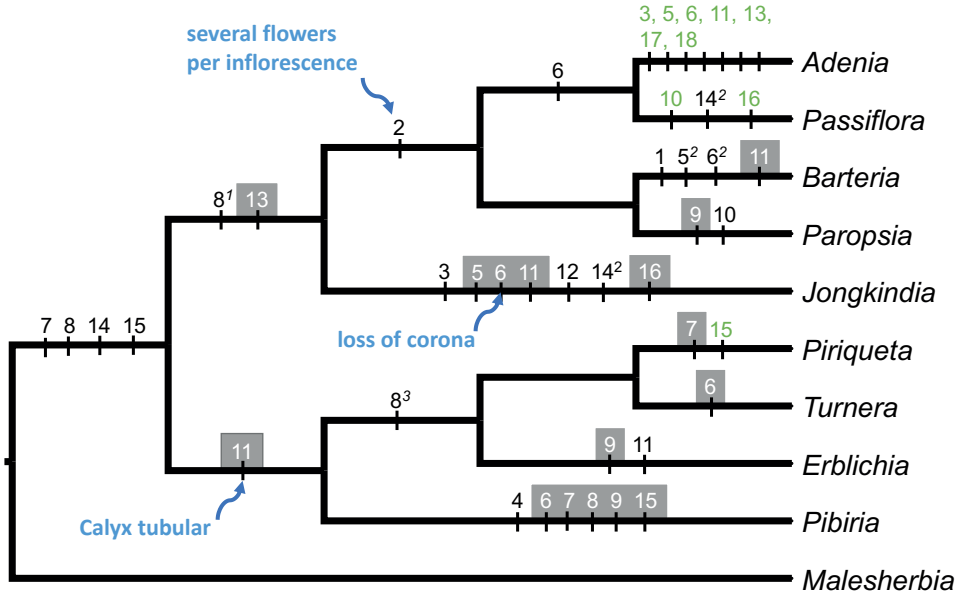
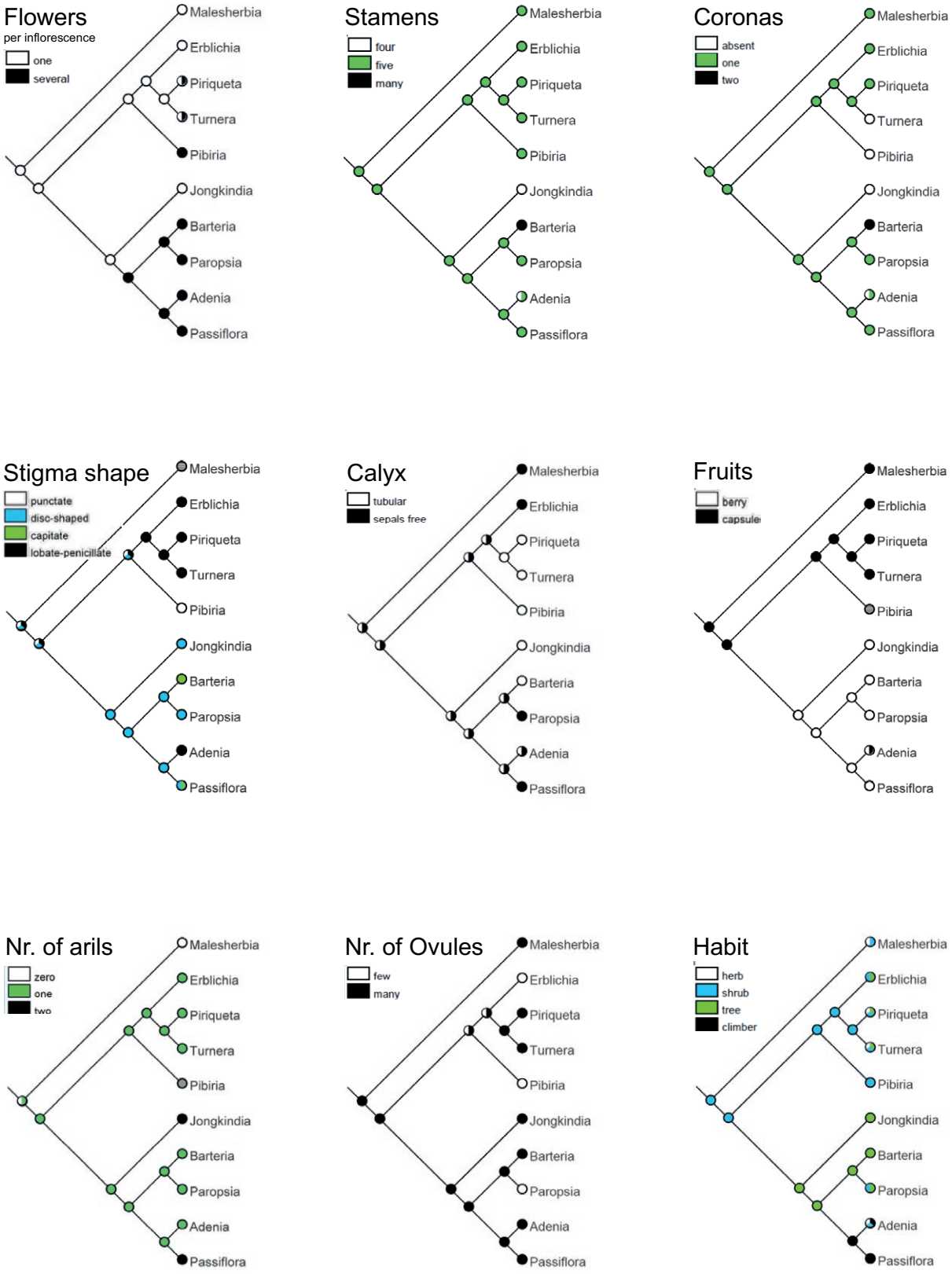
Suppl. Figure S1. Isotype specimen for for *Jongkindia mulbahii* Breteler & F.T. Bakker CJ12424, deposited in WAG at Naturalis Biodiversity Centre, Leiden, The Netherlands. The holotype is deposited at Meise (BR).

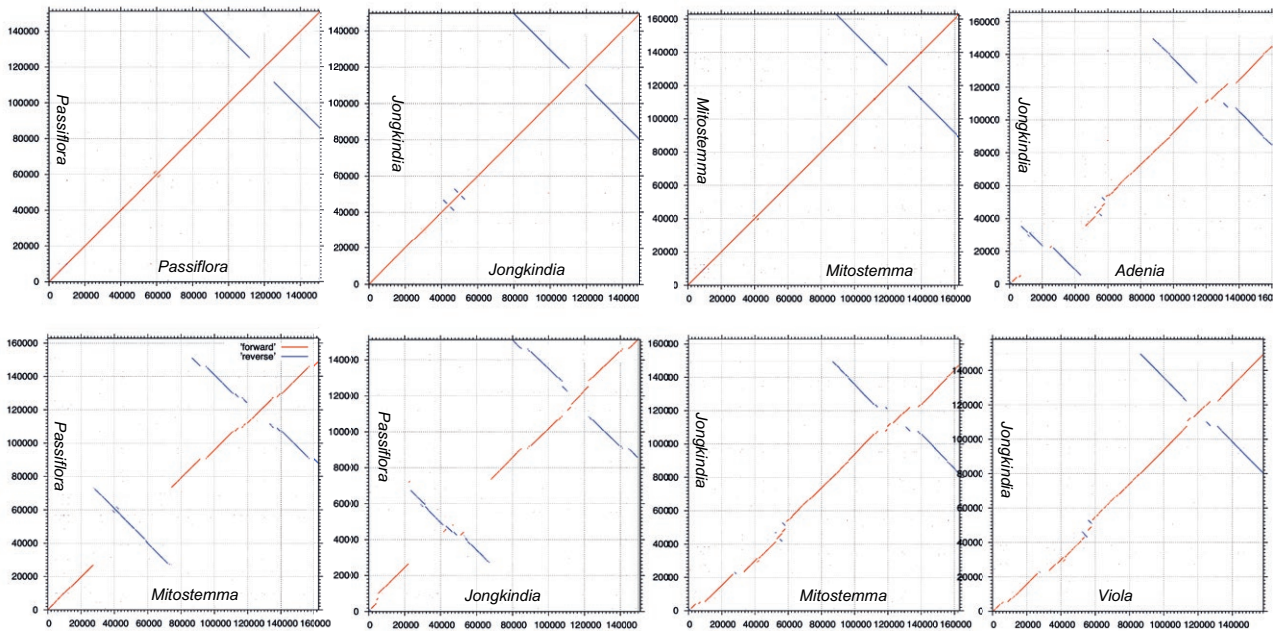
Suppl. Figure S2. Maximum likelihood IQ-TREE analysis of atpB sequences, using a partition according to codon position (1st +2nd versus 3rd). *Jongkindia mulbahii* is shown in a weakly-supported position in between Turneroideae and Passifloroideae.



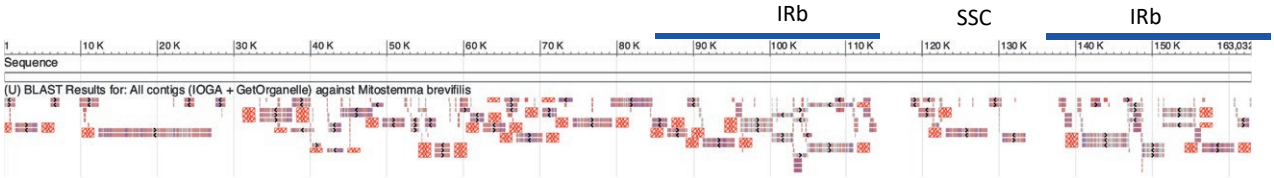
Suppl. Figure S3. Same tree as in Figure 10; optimization of individual characters as delineated in Table 2; numbers refer to characters listed in Table 2 and represent character state change, with gains (black), loss (grey boxes) and polymorphisms (green) indicated. Superscript numbers refer to change to that state in multi-state characters. Selected character state changes are indicated; 'lost' and 'double' refer to corona. For individual character optimizations see Suppl. Figure S4.



Suppl. Figure S4. Selected individual character optimisations, onto the tree of Fig. 8 and S3; character states are indicated by boxes and colours.



Suppl. figure S5. Dotplots of *Jongkindia mulbahii* draft plastome (149745bp), compared with *Passiflora pittieri* NC038125 (131,475bp), *Mitostemma brevilis* MT525867 (163,032bp), *Adenia mannii* NC043791 (165,364bp), and *Viola mirabilis* NC_041582.1 (158,162). Red indicates co-linearity whereas blue indicates reversal. The main Inverted Repeats (IRa and IRb) are visible in the top-right corners, as well as the two short reversals at around 50,000 in *Jongkindia mulbahii* and the large *Passiflora* reversal at position 25000 – 70,000.



Suppl. Figure S6. *Jongkindia mulbahii* plastome assembly scaffolds aligned to *Mitostemma brevilis* plastome sequence. Assembly scaffolds were generated by GetOrganelle and by IOGA (see text). The position of inverted repeats (IRa and IRb) are indicated.

Supplementary Table S1. Ancestral states listed by character and by node on the tree in Figure 8 (and S3).

Node\Char.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
node 8:	0	0	1	0	1	1	1	3	1	0	0	0	1	1	1	1	1	0/1
node 6:	0	0	1	0	1	1	1	3	0/1	0	0/1	0	1	1	1	1	1	0
node 5:	0	0	1	0	1	1	1	0/1/3	0/1	0	0/1	0	1	1	0/1	1	1	0
node 15:	0	1	1	0	1	1	1	1	1	0	0/1	0	0	1	1	1	2	0
node 18:	0	1	1	0	1	1	1	1	1	0	0/1	0	0	1	1	1	3	0
node 14:	0	1	1	0	1	1	1	1	1	0	0/1	0	0	1	1	1	2	0
node 12:	0	0	1	0	1	1	1	1	1	0	0/1	0	0	1	1	1	2	0
node 4:	0	0	1	0	1	1	1	0/1/3	1	0	0/1	0	1	1	\0/1	1	1	0
node 2:	0	0	1	0	1	1	0/1	0/1/3	1	0	0/1	0	1	0/1	0/1	1	1	0/1