SUPPLEMENTARY DATA

FIG. S1. EFNs in early plant ontogeny in *Senna* species of clade II and the EFN clade. (A, E, I) *Senna pleurocarpa* (clade II). (B, F, J) *Senna costata* (IV). (C, G, K) *Senna pallida* (VI). (D, H, L) *Senna aphylla* (VI). (A–D, J) Seedlings. Rectangular boxes in (C) and (D) indicate close-ups shown in (K) and (L), respectively. (E–I) Close-ups of seedlings' EFNs (indicated by arrowheads). Note the apparent lack of EFNs in (H). (E, I) Substitutive EFNs on stipule lobes (arrowheads and dotted ellipse). (B–D, F, G, J) True EFNs. (J) Another seedling with leaf 1 bearling two pairs of leaflets and EFNs between each pair (arrowheads). (K, L) Unknown structures (arrows) at the base of cotyledons (c) and epycotyl (e). Numbers in order of leaf development (1 = first leaf). Scale bars (indicative) = 1 cm.

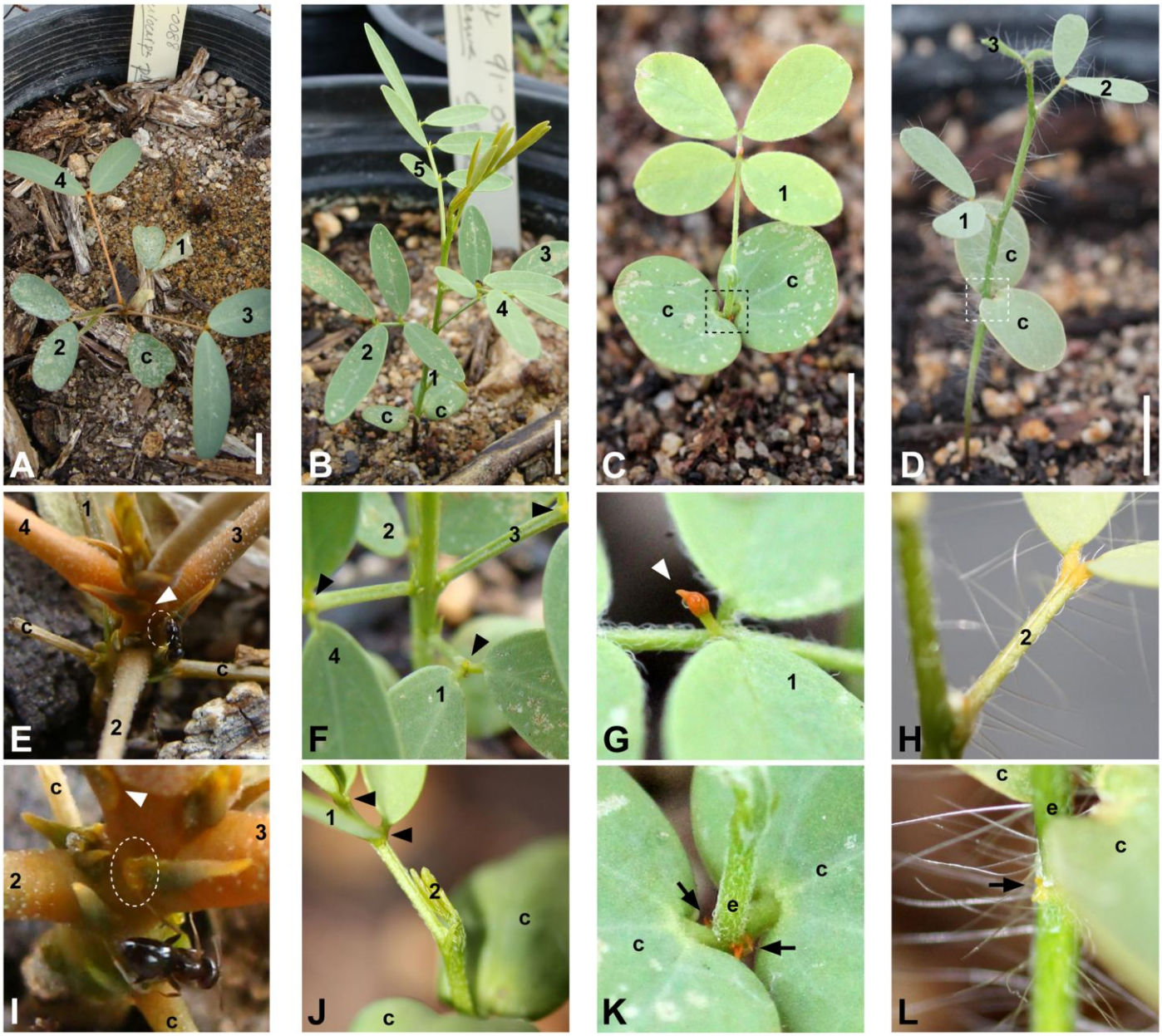

TABLE S1. Summary of inferred ancestral states on selected nodes from analyses over 500 ML bootstrap trees (trees from Marazzi and Sanderson, 2010). See Appendix S3 for full outputs from Mesquite reconstructions

Crown clade name (node number)	# trees w/ clade node	% trees w/ node	% trees w/ estimated character state at selected node														
			A0	A1	A2	A3	A4	A5	B0	B1	B2	B3	B4	B5	C0	C1	C2	C3
EFN clade (30)	466	93,2	0	100	0	0	0	0	3,2	0	0	92,5	4,2	0	0	100	0	0
VII+VI+V (31)	409	81,8	0	100	0	0	0	0	5,6	0	0	87,5	6,9	0	0	100	0	0
IV (112)	496	99,2	0	100	0	0	0	0	0	0	0	98,8	1,2	0	0	100	0	0
VI+V (76)	499	99,8	0	100	0	0	0	0	0,1	0	0	49,8	50,1	0	0	100	0	0
VI (77)	498	99,6	0	100	0	0	0	0	0,1	0	0	49,8	50,1	0	0	100	0	0
V (104)	498	99,6	0	100	0	0	0	0	0	0	0	0,0	100	0	0	100	0	0
Aphyllae+*S. kurtzii* (86)	339	67,8	100	0	0	0	0	0	33,3	0	0	33,4	33,2	0	0	0	0	0
Aphyllae (87)	499	99,8	0	100	0	0	0	0	100	0	0	0	0	0	0	100	0	0
VII (32)	500	100	0	100	0	0	0	0	0	0	0	97,7	2,3	0	0	100	0	0
VIIa (33)	363	72,6	0	100	0	0	0	0	0	0	0	100	0	0	0	100	0	0
Basiglandulosae (53)	487	97,4	0	100	0	0	0	0	0	100	0	0	0	0	0	100	0	0

LITERATURE CITED

Marazzi B, Sanderson MJ. 2010. Large-scale patterns of diversification in the widespread legume genus *Senna* and the evolutionary role of extrafloral nectaries. *Evolution* **64**: 3570–3592.