

SUPPLEMENTARY DATA

Fig. S1: Analyses of the ETS-dataset (ML and BI). Non-*Salvia* genera are highlighted (bold); only support values $\geq 75\%$ (BS) and ≥ 0.95 (PP) are illustrated.

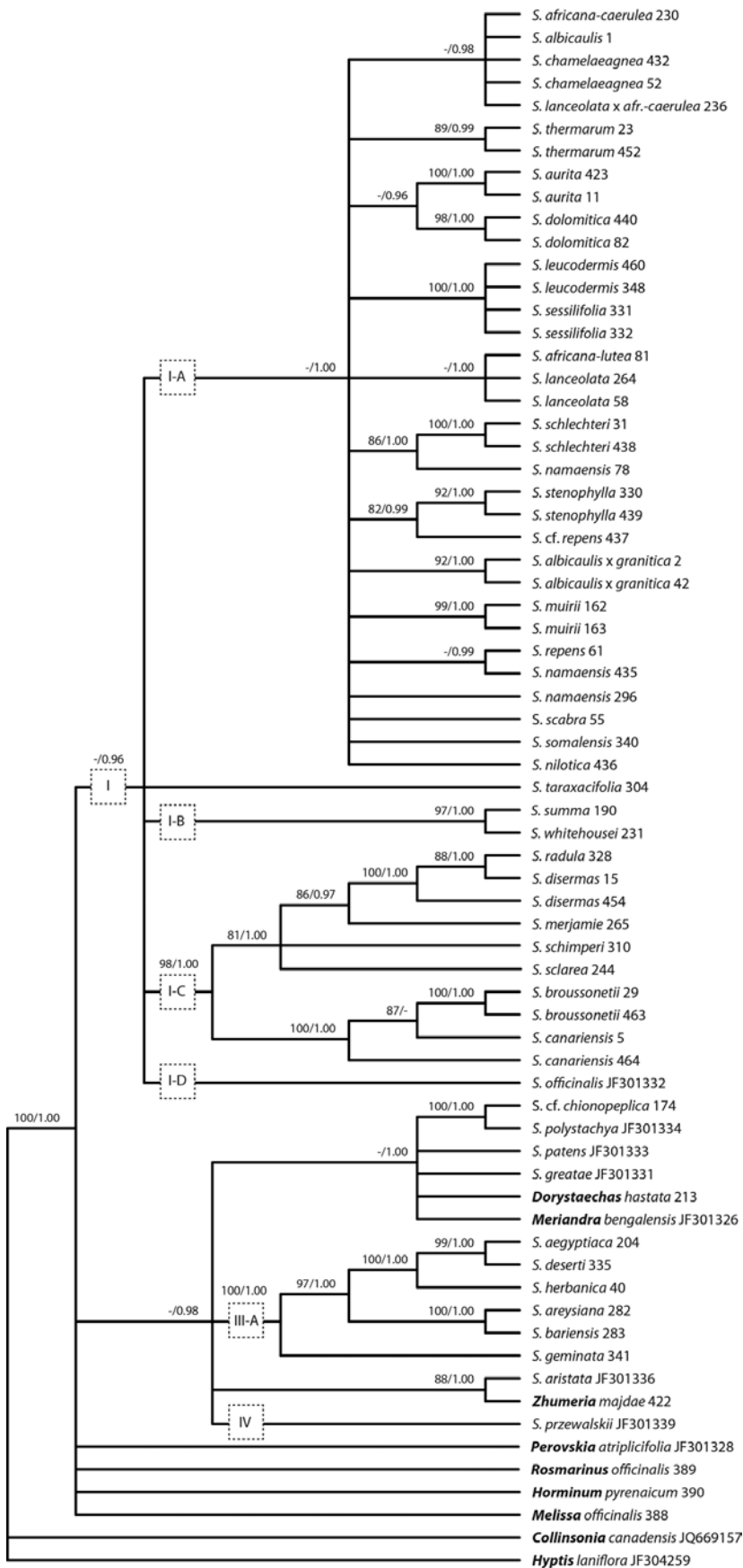


Fig. S2: Reconstruction of the ancestral distribution of Sub-Saharan African *Salvia*. Based on the combined dataset using the 50% majority-rule consensus-tree and 100 randomly sampled trees derived from BI; analysed under the MP criteria using Mesquite.

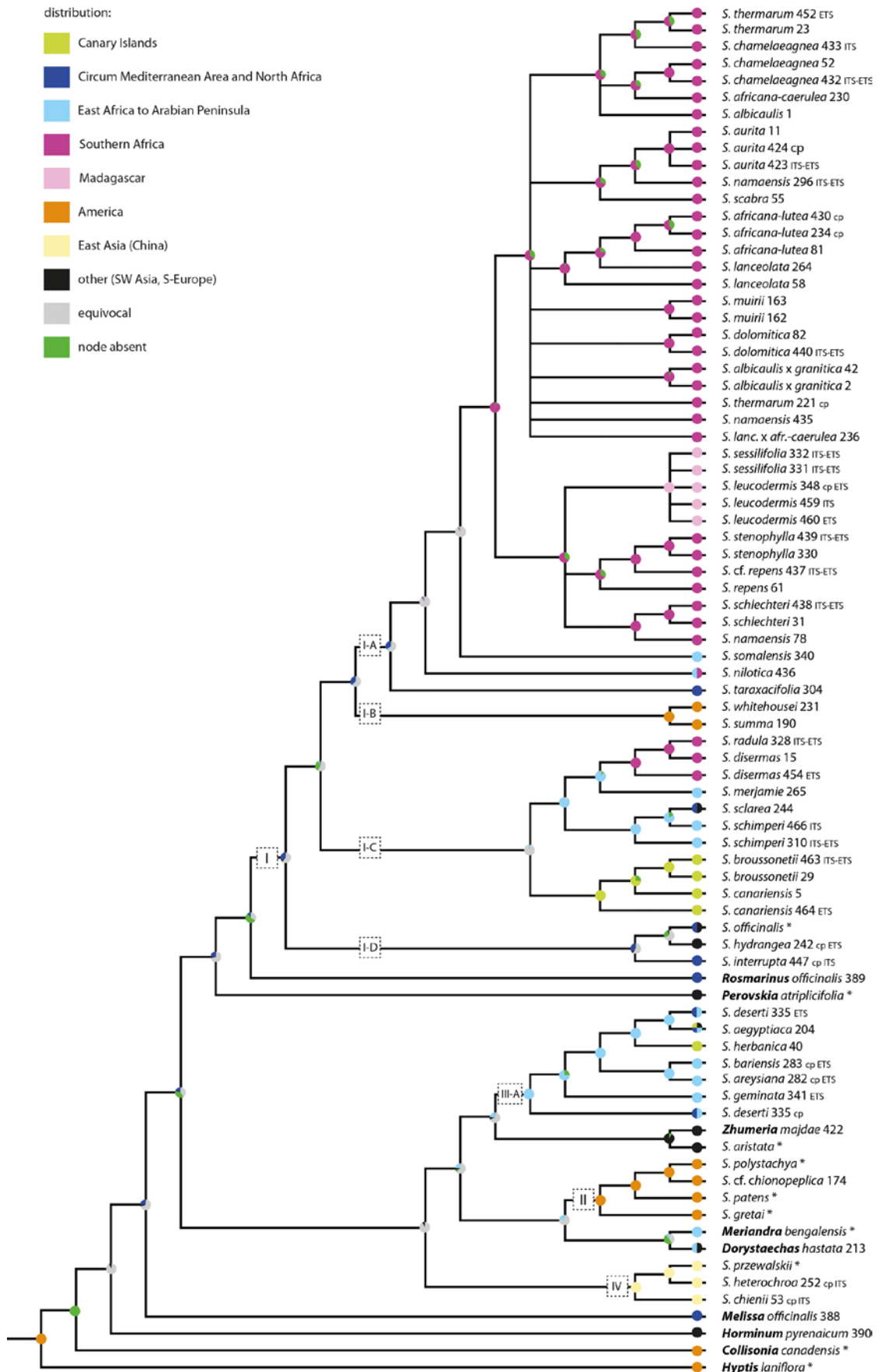


Fig. S3: Ancestral character state reconstruction of the life form in Sub-Saharan African *Salvia*. Based on the combined dataset; using the 50% majority-rule consensus-tree and 100 randomly sampled trees derived from BI; analysed under the MP criteria using Mesquite.

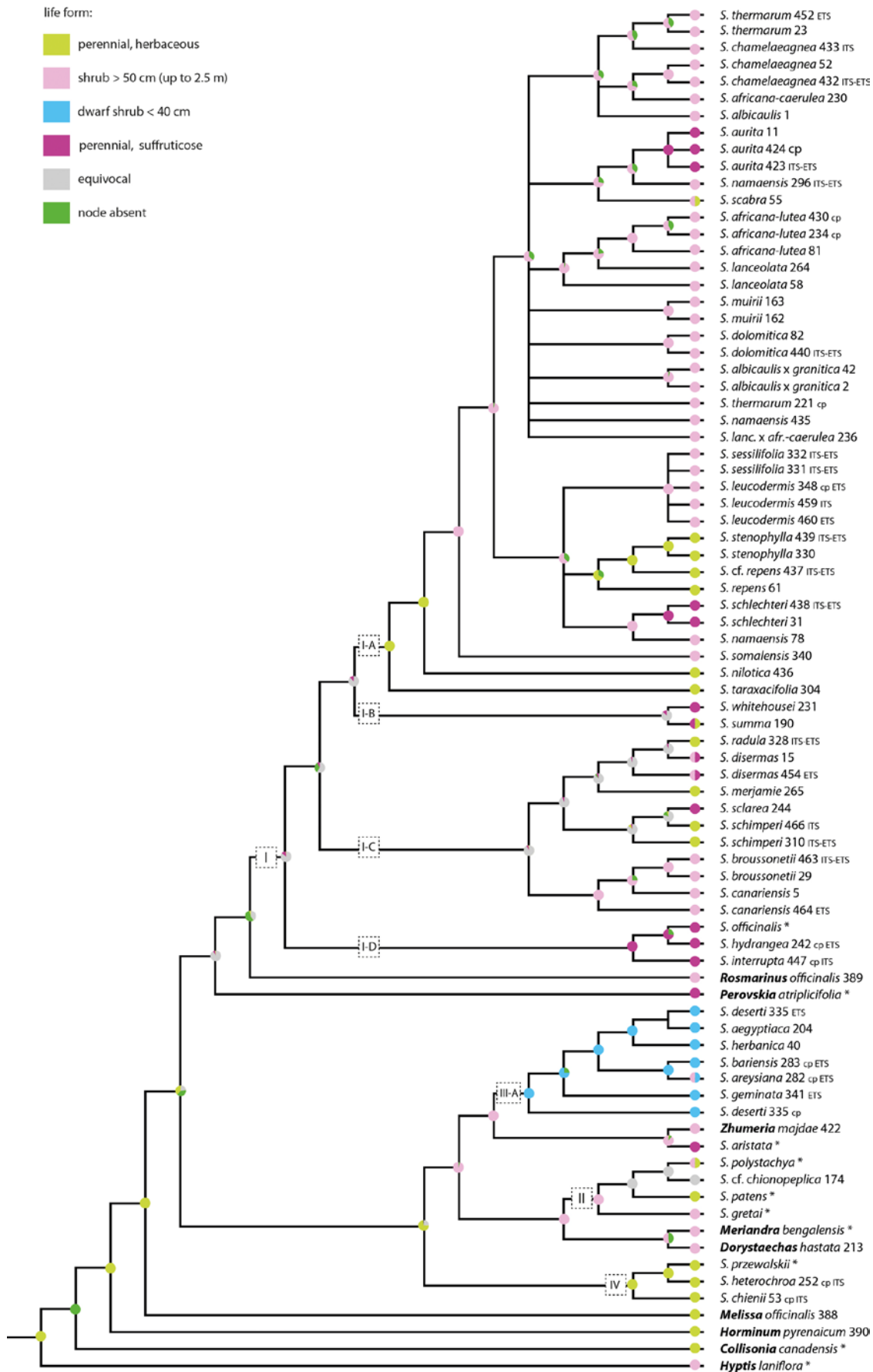


Fig. S4: Ancestral character state reconstruction of the calyx morphology in Sub-Saharan African *Salvia*. Based on the combined dataset; using the 50% majority-rule consensus-tree and 100 randomly sampled trees derived from BI; analysed under the MP criteria using Mesquite.

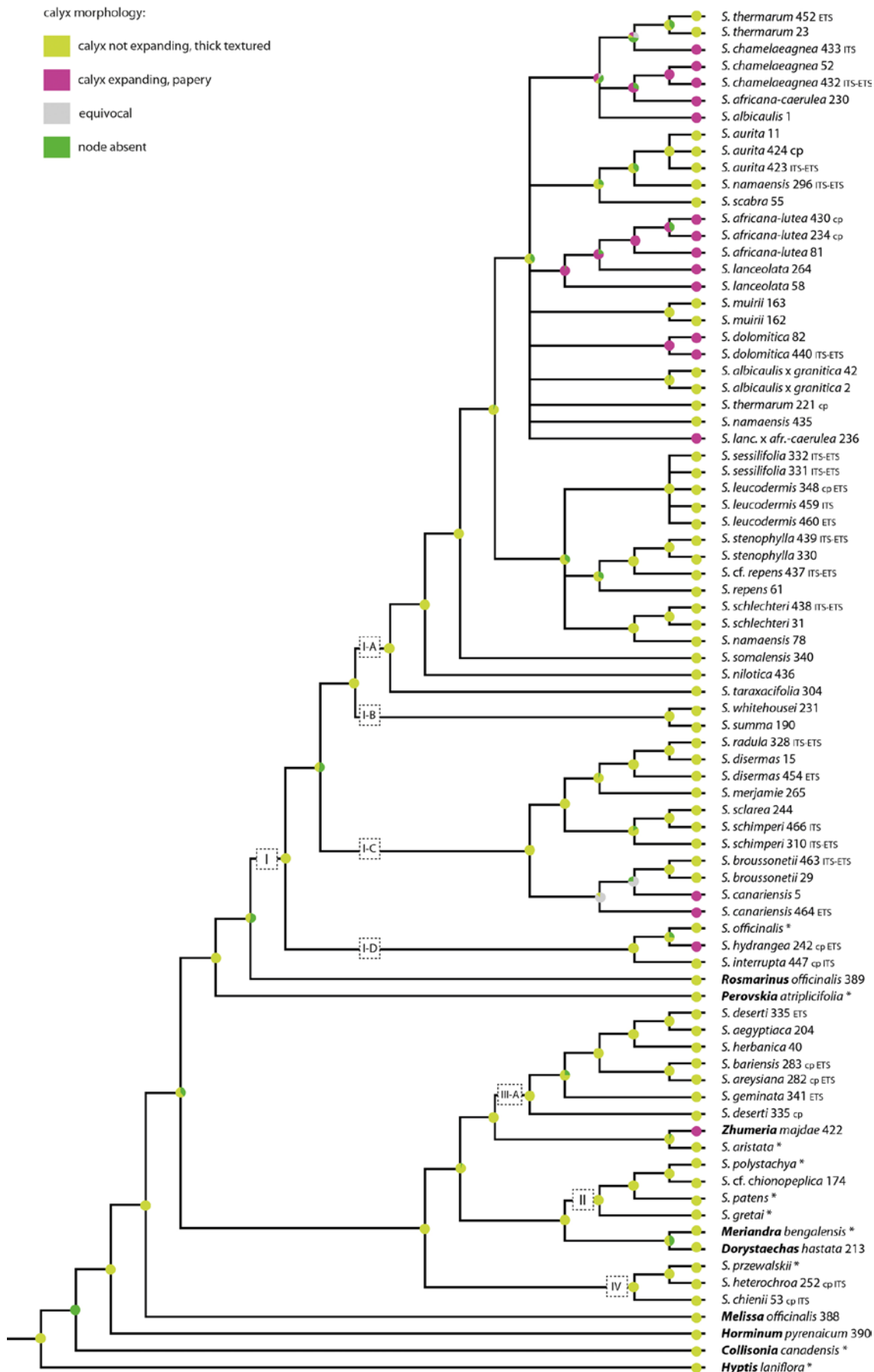


Fig. S5: Ancestral character state reconstruction of the stamen morphology in Sub-Saharan African *Salvia*. Based on the combined dataset; using the 50% majority-rule consensus-tree and 100 randomly sampled trees derived from BI; analysed under the MP criteria using Mesquite. Non-*Salvia* spp. were coded as having ‘other’ stamen morphology since they lack the typical lever mechanism, except *Rosmarinus* (stamen type C).

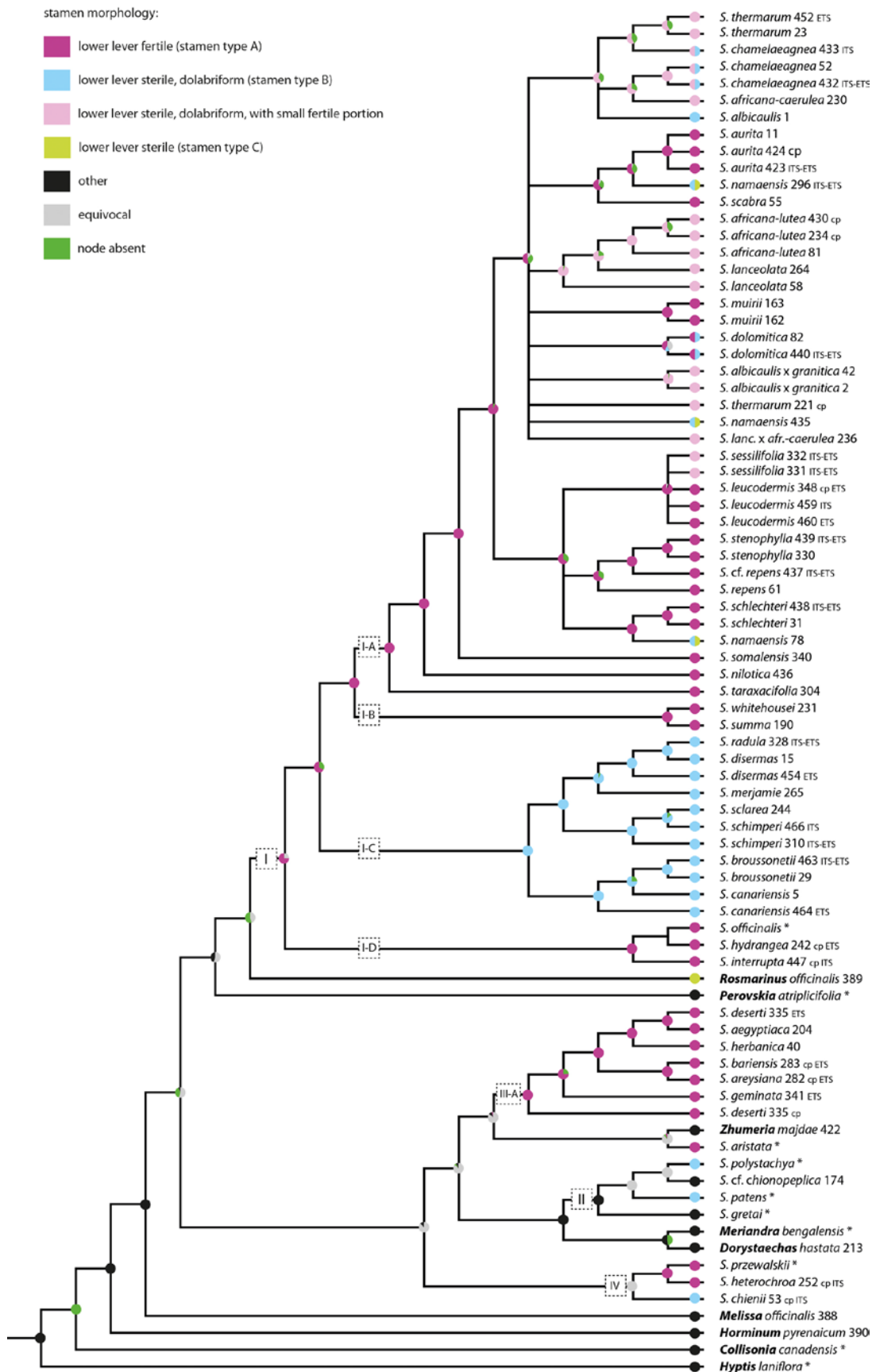


Fig. S6: Ancestral character state reconstruction of the pollination syndrome in Sub-Saharan African *Salvia*. Based on the combined dataset; using the 50% majority-rule consensus-tree and 100 randomly sampled trees derived from BI; analysed under the MP criteria using Mesquite. The character state ‘± mellittophilous’ refers to small flowered species with exposed stamens and also includes two SSA taxa assumed to be pollinated by long-proboscid flies.

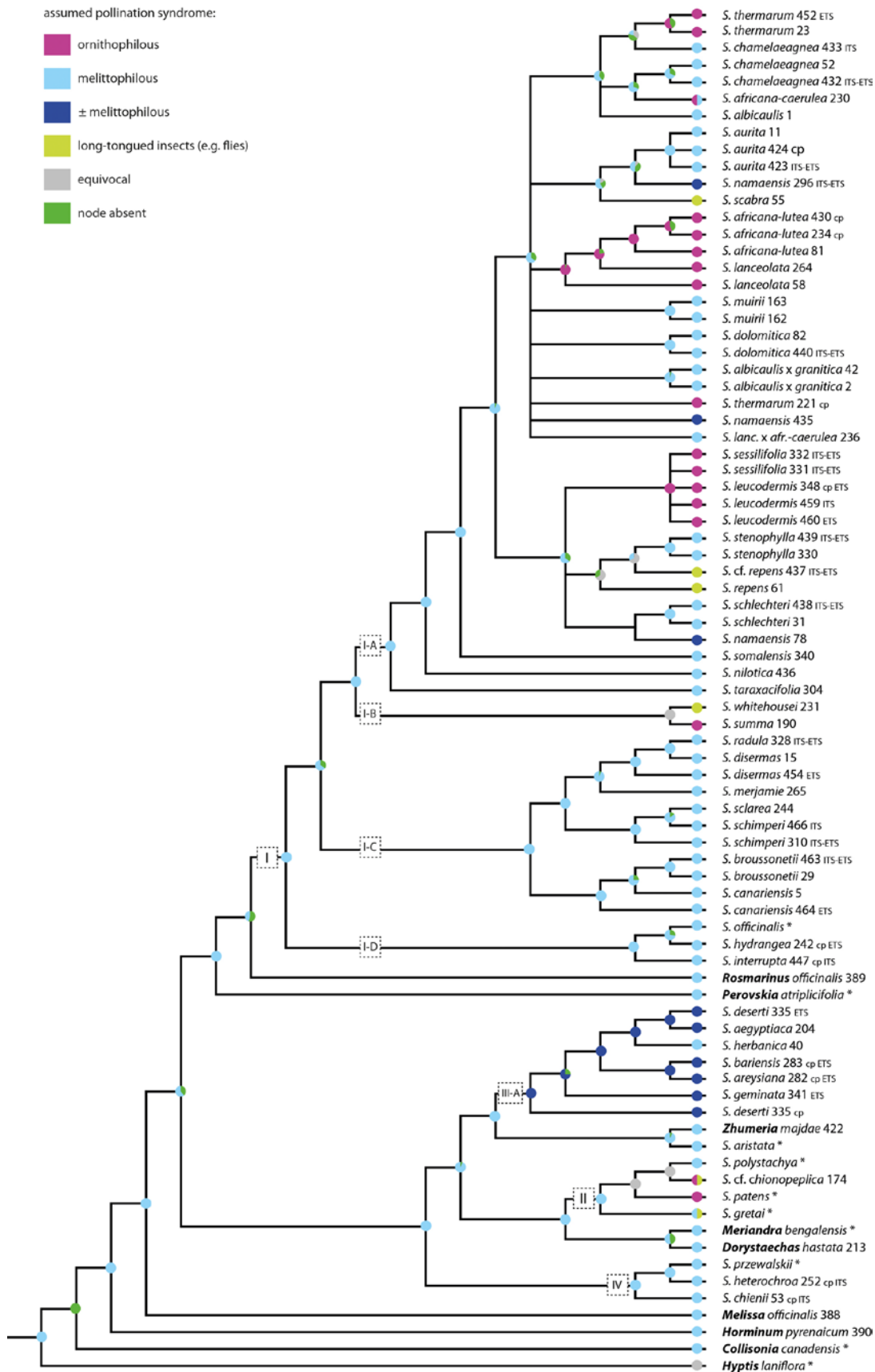


Table S1: Character states coded for the ancestral character state reconstruction. Based on observations of living collections (Botanical Garden Mainz), herbarium material and literature research by the first author. Character states (bold numbers) are indicated by ‘?’ when sufficient data is missing; coding as follows: **Character 1 (distribution)**: (1) Canary Islands, (2) Circum Mediterranean Area and North Africa, (3) East Africa and Arabian Peninsula, (4) Southern Africa, (5) Madagascar, (6) America, (7) East Asia, (8) other (implying SW Asia for all taxa but *Horminum pyrenaicum*, which is endemic to S-Europe); **Character 2 (life form)**: (1) shrub > 0.5 m, up to 2.5 m, (2) dwarf shrubs < 0.4 m, (3) suffruticose perennials, (4) herbaceous perennials; **Character 3 (calyx morphology)**: (1) calyx campanulate-infundibuliform with widely diverging lips, expanding from flower to fruit, papery, (2) not or only slightly diverging lips; not or little expanding, thick-textured; **Character 4 (stamen morphology: thecae of the lower lever arm)**: (1) fertile, (2) dolabriform, with small fertile portion, (3) sterile, dolabriform, (4) sterile, acute, (5) other (stamen morphology of non-*Salvia* taxa lacking lever like modifications or NW taxa of sect. *Audibertia* expressing a different stamen morphology); **Character 5 (pollination syndrome)**: (1) ornithophilous, (2) melittophilous, (3) ± melittophilous with rather minute to small, open accessible flowers; a diverse spectrum of potential pollinators is expected, (4) adapted to pollination by long-tongued insects, e.g. long-proboscid flies or Lepidoptera. # = pollination syndrome is assumed based on morphology. * personal observations are in conflict with data from literature.

Taxon	Character 1 distribution		Character 2 life form		Character 3 calyx morphology		Character 4 stamen morphology		Character 5 pollination syndrome	
	state	reference	state	reference	state	reference	state	reference	state	reference
<i>Collinsonia canadensis</i>	6	15	4	15	2	15, 18	5	15, 18	2	15
<i>Dorystaechas hastata</i>	3 8	6, 17, 18	1	1, 6	2	1, 18	5	6, 18, 39	2	#
<i>Horminum pyrenaicum</i>	8	18	4	1, 18, 31	2	1, 18	5	1, 18	2	48
<i>Hypätis laniflora</i>	6	40	1	30, 40	2	37	5	40	?	-
<i>Melissa officinalis</i>	2	24	4	1, 13	2	1	5	1, 18, 55	2	49
<i>Meriandra bengalensis</i>	3	18	1	32	2	1	5	1, 18, 39	2	#
<i>Perovskia atriplicifolia</i>	8	24	3	1, 32	2	1	5	1, 18, 39	2	#
<i>Rosmarinus officinalis</i>	2	24	1	1, 13	2	1	4	1, 18, 39	2	50
<i>Salvia aegyptiaca</i>	1 2 3 8	2, 12	2	1, 2	2	1, 2	1	1, 2,	3	#
<i>S. africana-caerulea</i>	4	2, 10	1	2, 10	1	1, 2, 10	2	1, 2	1 2	#, 45, 59
<i>S. africana-lutea</i>	4	2, 10	1	2, 10	1	1, 2, 10	2	2, 41	1	41, 45, 46, 47
<i>S. albicaulis</i>	4	2, 10	1	2, 10	1	2, 10	3	1, 2	2	#
<i>S. albicaulis</i> × <i>granitica</i>	4	3	1	3	2	1	2	1	2	3
<i>S. areysiana</i>	3	4, 5, 8	1 2	1, 5	2	1, 8	1	1, 8	3	#
<i>S. aristata</i>	8	7, 9	3	7, 9	2	7	1	9	2	#
<i>S. aurita</i>	4	2, 10	3	1, 2, 10	2	1, 2, 10	1	2	2	#
<i>S. bariensis</i>	3	11	2	11	2	11	1	11	3	#
<i>S. broussonetii</i>	1	2, 12	1	1, 2	2	1, 2	3	1, 2	2	#
<i>S. canariensis</i>	1	2, 12	1	1, 2	1	1, 2	3	1, 2, 44	2	#
<i>S. chamelaeagnea</i>	4	2, 12	1	2, 10	1	2, 10	2 3	1, 2	2	#

Taxon	Character 1		Character 2		Character 3		Character 4		Character 5	
	distribution		life form		calyx morphology		stamen morphology		pollination syndrome	
	state	reference	state	reference	state	reference	state	reference	state	reference
<i>S. chienii</i>	7	13	4	1, 13	2	1, 13	3	1, 13	2	#
<i>S. cf. chionoeplica</i>	6	14	1	1, 4	2	1	5	1, 60	14	51
<i>S. deserti</i>	23	2, 16	2	1, 2	2	1, 2	1	2	3	#
<i>S. disermas</i>	4	2, 10	13	1, 2, 10	2	1, 2, 10	3	1, 2	2	#
<i>S. dolomitica</i>	4	2, 10	1	1, 2, 10	1	1, 2, 10	13	2	2	#
<i>S. geminata</i>	3	5	2	1, 5	2	1, 5	1	1, 5	3	#
<i>S. gretai</i>	6	4	1	4	2	29	5	39, 43	24	51
<i>S. herbanica</i>	1	12, 19, 20	2	1, 19	2	1, 19	1	1*, 19	2	#, 52
<i>S. heterochroa</i>	7	13	4	1, 13	2	1, 13	1	13	2	#
<i>S. hydrangea</i>	8	6, 7	3	1, 6, 7	1	1, 6, 7	1	6	2	#
<i>S. interrupta</i>	2	2, 21	3	1, 2	2	1, 2	1	1, 2	2	#
<i>S. lanceolata</i>	4	2, 10	1	2, 10	1	1, 2, 10	2	1, 2, 41	1	41, 45, 47
<i>S. lanceolata</i> × <i>africana-caerulea</i>	4	3	1	1	1	1, 58	2	1	2	#
<i>S. leucodermis</i>	5	2, 22, 23	1	1, 2, 22, 23	2	1, 2, 22, 23	1	2	1	#
<i>S. merjamie</i>	3	2, 25, 26	4	1, 2	2	1, 2	3	1, 2	2	#
<i>S. muirii</i>	4	2, 10	1	2, 10	2	1, 2, 10	1	2	2	#
<i>S. namaensis</i>	4	2, 10	1	1, 2, 10	2	1, 2, 10	34	1, 2	3	#
<i>S. nilotica</i>	34	2, 25, 26	4	1, 2	2	1, 2	1	1, 2	2	#
<i>S. officinalis</i>	28	4	3	1, 31	2	1, 31	1	1, 13, 42	2	1, 48
<i>S. patens</i>	6	4	4	1, 27, 33	2	1	3	1, 39, 42	1	51
<i>S. polystachya</i>	6	4, 27	14	4, 27, 56	2	56	3	39	2	51
<i>S. przewalskii</i>	7	13	4	13	2	1, 13	1	1, 44	2	#
<i>S. radula</i>	4	2, 10	4	2, 10	2	1, 2, 10	3	1, 2	2	#
<i>S. repens</i>	4	2, 10	4	2, 10	2	1, 2, 10	1	2	4	#, 53, 54
<i>S. scabra</i>	4	2, 10	14	1, 2, 10	2	1, 2, 10	1	1, 2, 44	4	#, 53, 54
<i>S. schimperi</i>	3	2	4	2	2	2, 10	3	2	2	#
<i>S. schlechteri</i>	4	2, 10	3	1, 2, 10	2	1, 2, 10	1	1, 2	2	#
<i>S. sclarea</i>	28	2, 6, 7	3	1, 2, 6, 7	2	1, 2, 6, 7	3	1, 2, 6, 39	2	1, #
<i>S. sessilifolia</i>	5	2, 22, 23	1	1, 2, 22, 23	2	1, 2, 22, 23	2	2	1	47
<i>S. somalensis</i>	3	2	1	1, 2	2	1, 2, 10	1	1, 2	2	#
<i>S. stenophylla</i>	4	2, 10	4	1, 2, 10	2	1, 2, 10	1	2, 44	2	#
<i>S. summa</i>	6	4	34	34	2	1, 38	1	38	1	47, 51
<i>S. taraxacifolia</i>	2	2, 21	4	1, 2	2	1, 2	1	1, 2, 39	2	#
<i>S. thermarum</i>	4	28	1	1, 28	2	1, 28	2	1, 41	1	41
<i>S. whitehousei</i>	6	4	3	35	2	35, 36	1	35, 36	4	51
<i>Zhumeria majdae</i>	8	17, 18	1	18	1	18	5	18, 39	2	57

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