SUPPLEMENTARY DATA

Phylogenetic relationships and resulting generic reassignments

The results of the present phylogenetic analyses have considerably changed the generic classification within *Lapeirousia* (Goldblatt, 1972), which resulted in the description of three new genera to accommodate the relationships obtained (Goldblatt and Manning, Submitted). The principal findings that triggered these changes are 1) the nested position of genera *Cyanixia* and *Savannosiphon* within *Lapeirousia* sect *Paniculatae* (now *Psilosiphon*), which is sister to *Lapeirousia*, and 2) the paraphyletic nature of subgenus *Paniculata* with its second section, *Fastigiatae* (now *Codonorhiza*), retrieved as sister to the remainder of the entire *Lapeirousia* clade (Fig. 1). The isolated species *L. neglecta*, sister to a clade comprising genera *Psilosiphon*, *Cyanixia*, *Savannosiphon* and *Lapeirousia*, has been accorded generic status as *Schizorhiza*. The species previously allocated to *Lapeirousia* subgenus *Lapeirousia* are now assigned to the more narrowly circumscribed genus *Lapeirousia*.

This new generic taxonomy is supported by multiple morphological characters (Goldblatt and Manning, Submitted). The broad treatment of the *Lapeirousia* clade as the genus *Lapeirousia* was justified by presence of a corm with a flat base (a derived state). However, different corm tunic morphology, floral bracts, seed morphology and sometime pollen grain apertures between all four genera are consistent with their recognition as separate genera. The ovoid seeds of *Codonorhiza* are unique in Watsonieae and the single banded operculum of the pollen of *Codonorhiza* and *Schizorhiza* contrast with the two-banded operculum found in genera *Lapeirousia* and *Psilosiphon*. Chromosome cytology also supports this new generic assignment; all species of *Codonorhiza* have a base number of x=10; *Schizorhiza* has x=6; and *Lapeirousia* x= 9/8 (possibly also 10). *Psilosiphon* present the widest variability in the group in terms of chromosome numbers, ranging from $2n$=16 to $2n$=6, and has also the largest geographic range.

Further explanation regarding the interpretation of these newly established relationships between and within these groups, as well as their taxonomic implications, are discussed in more detail in a taxonomic revision of the *Lapeirousia* clade (Goldblatt and Manning, Submitted).

Fig. S1. Partitioned nuclear and plastid Bayesian half-compatible consensus tree of the *Lapeirousia* clade. Bayesian posterior probabilities are provided below the branches.

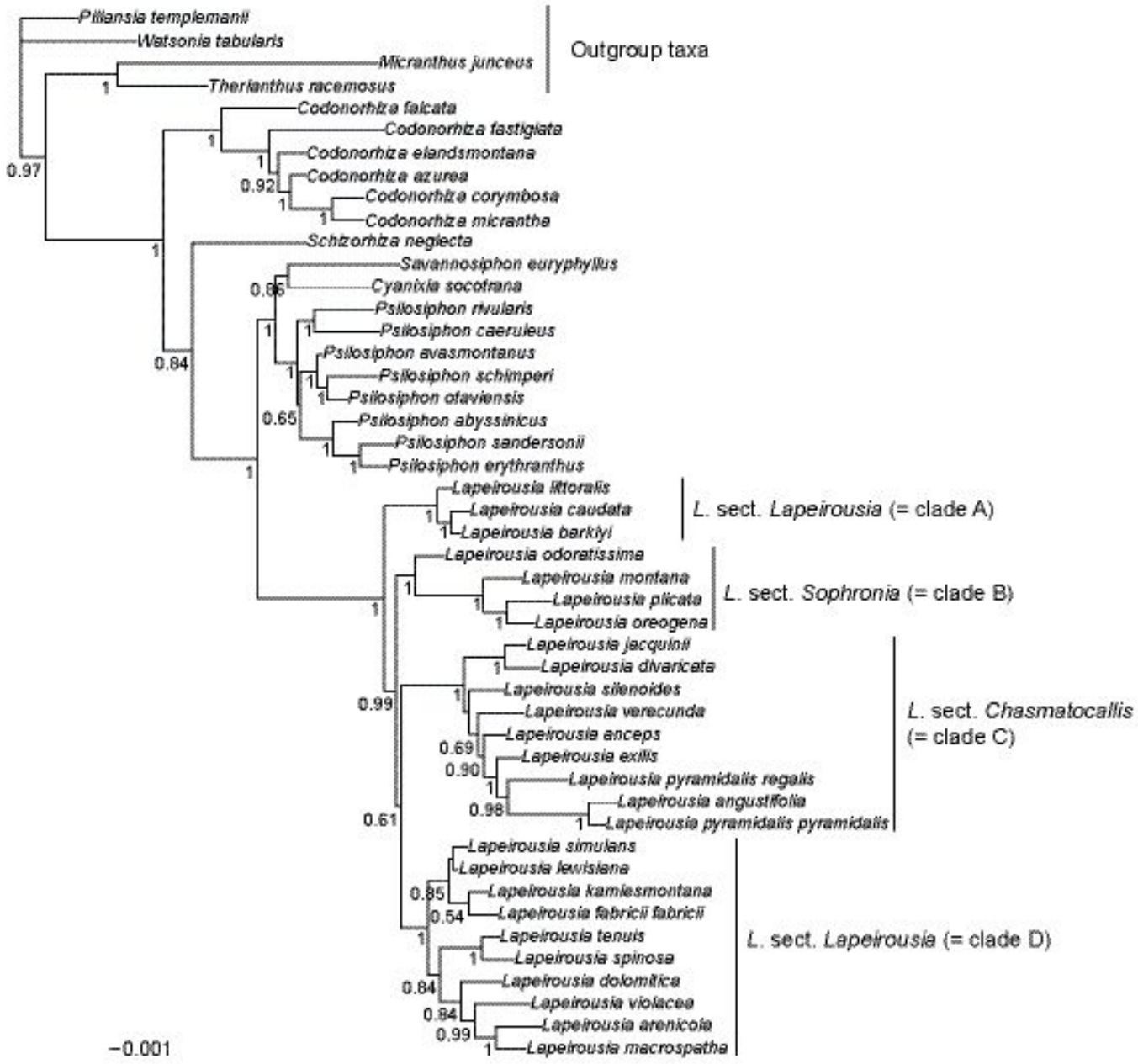

Table S1. Sampled species used in the phylogenetic analysis of the *Lapeirousia* clade, including voucher information and GenBank accession numbers.

Species	**Collector**	*matK*	*ndhJ*	*ycf5*	*rpl16*	*trnL-F*	*trnQ-rps16*	*ndhF-rpl32*	*rpl32-trnL*	*ACCD-psa1*	*RPB2*
Codonorhiza azurea (Eckl. ex Baker) Goldblatt & J.C.Manning	Goldblatt & Porter 13159	X	X	X	X	X	X		X	X	
Codonorhiza corymbosa (L.) Goldblatt & J.C.Manning	Goldblatt & Manning sn	X			X	X	X		X	X	
Codonorhiza elandsmontana Goldblatt & J.C.Manning	Goldblatt 5852	X	X	X	X	X	X	X	X	X	X
Codonorhiza falcata (L.f.) Goldblatt & J.C. Manning	Goldblatt & Manning 9742	X	X	X	X	X	X	X	X	X	
Codonorhiza fastigiata (Lam.) Goldblatt & J.C.Manning	Goldblatt & Manning 13005	X	X	X	X	X	X	X	X	X	
Codonorhiza micrantha (E.Mey. ex Klatt) Goldblatt & J.C.Manning	McMaster sn	X	X	X	X	X		X	X	X	
Cyanixia socotrana (Hook.f.) Goldblatt & J.C.Manning	Lavaranos sn	X	X	X	X	X			X		
Lapeirousia anceps (L.f.) Ker Gawl.	Goldblatt & Porter 13187	X	X	X	X	X	X	X	X	X	X
Lapeirousia angustifolia Schltr.	Goldblatt & Manning 13027	X				X					X
Lapeirousia arenicola Schltr.	Goldblatt & Manning 9700	X	X	X	X	X	X	X	X	X	
Lapeirousia barklyi Baker	G & M 13036	X	X	X		X	X	X	X	X	X
Lapeirousia caudata Schinz	Goldblatt & Porter 13489	X	X		X	X			X	X	
Lapeirousia divaricata Baker	Goldblatt & Manning 9633	X	X	X	X	X	X	X	X	X	
Lapeirousia dolomitica	Manning 3031	X	X	X	X	X	X	X	X	X	

Dinter											
Lapeirousia exilis Goldblatt	Goldblatt & Manning 13031	X	X	X	X	X	X		X	X	X
Lapeirousia fabricii (D.Delaroche) Ker Gawl. *subsp fabricii*	Goldblatt & Porter 12818	X	X	X	X	X	X	X	X		X
Lapeirousia jacquinii N.E.Br.	March et al. 214	X	X	X	X	X	X	X	X	X	X
Lapeirousia kamiesmontana Goldblatt & J.C.Manning	Goldblatt & Porter 13170	X				X					
Lapeirousia lewisiana B.Nord.	Goldblatt & Manning 9893	X	X		X	X	X		X		
Lapeirousia littoralis Baker	Goldblatt & Manning 11329	X	X	X	X	X	X	X	X	X	X
Lapeirousia macrospatha Baker	Manning 3025	X	X	X	X	X	X	X	X	X	
Lapeirousia montana Klatt	Helme 4695	X	X	X	X	X		X	X	X	X
Lapeirousia odoratissima Welw, ex Baker	Bergh 1889	X	X	X	X	X	X		X	X	
Lapeirousia oreogena Schltr. ex Goldblatt	Harrower 306	X	X	X	X	X	X	X	X	X	X
Lapeirousia plicata (Jacq,) Diels *subsp. plicata*	Manning 3177	X	X	X	X	X	X	X	X	X	X
Lapeirousia pyramidalis (Lam.) Goldblatt *subsp pyramidalis*	Barker 6439	X	X	X	X	X	X	X	X	X	X
Lapeirousia pyramidalis subsp regalis Goldblatt & J.C.Manning	Goldblatt & Manning 9960	X	X	X	X	X	X	X	X	X	
Lapeirousia silenoides (Jacq.) Ker Gawl.	Manning 3027	X	X	X	X	X	X	X	X	X	X
Lapeirousia simulans Goldblatt & J.C.Manning	Goldblatt & Porter 13126	X		X	X	X	X		X	X	
Lapeirousia spinosa (Goldblatt) Goldblatt	Manning 3023	X	X	X	X	X	X	X	X	X	X

Lapeirousia tenuis (Goldblatt) Goldblatt	G & M 9935	X	X	X	X	X	X	X	X	X	
Lapeirousia verecunda Goldblatt	Van der Niet 459	X	X	X	X	X	X	X	X	X	X
Lapeirousia violacea Goldblatt	Goldblatt & Porter sn	X	X	X	X	X	X	X	X	X	X
Psilosiphon abyssinicus (R.Br. ex A.Rich.) Goldblatt & J.C.Manning	Edwards et al. 97	X	X	X	X	X	X		X	X	
Psilosiphon avasmontanus (Dinter) Goldblatt & J.C.Manning	Goldblatt et al. 13211	X	X	X	X	X	X		X	X	
Psilosiphon coeruleus(Schinz) Goldblatt & J.C.Manning	Goldblatt et al. 13204	X	X	X	X	X	X		X	X	X
Psilosiphon erythranthus (Klotzsch ex Klatt) Goldblatt & J.C.Manning	Goldblatt 7514	X	X	X	X	X	X	X	X	X	
Psilosiphon otaviensis (R.C.Foster) Goldblatt & J.C.Manning	Goldblatt & Manning 8837	X	X	X		X	X		X		
Psilosiphon rivularis (Wanntorp) Goldblatt & J.C.Manning	Goldblatt et al. 13228	X	X	X	X	X	X	X	X	X	X
Psilosiphon sandersonii (Baker) Goldblatt & J.C.Manning	Goldblatt & Manning 9806	X	X	X		X	X		X		
Psilosiphon schimperi (Aschers. & Klatt) Goldblatt & J.C.Manning	Lacroix sn	X	X	X	X	X	X		X		
Savannosiphon euryphyllus (Harms) Goldblatt & Marais	Gereau 7006	X	X	X	X	X	X	X	X		
Schizorhiza neglecta (Goldblatt) Goldblatt & J.C.Manning	Goldblatt & Manning 9489	X	X	X	X	X	X	X	X	X	

Outgroups											
Micranthus junceus (Baker) N.E.Br.	Goldblatt 10451	X		X	X	X		X	X		
Pillansia templemanii L.Bolus	Bean I-6	X	X	X	X	X		X	X		
Therianthus racemosus (Klatt) G.J.Lewis	Goldblatt 10454	X	X	X	X	X			X		
Watsonia tabularis J.W.Mathews & L.Bolus	Manning 3130	X	X	X		X		X	X		