

Table 1. Primers used in amplification and sequencing of liverwort regions. Primers used in initial PCR reactions are highlighted in bold.

GENE/ REGION	PRIMER	DIRECTION	SEQUENCE	REFERENCE
18S (nr)	18G	forward	5' -TGG CAC CAG ACT TGC CCT	Hamby et al. 1988 in Cox et al. 2000
18S (nr)	18H	forward	5' -GCC CTT CCG TCA ATT CCT TTA AGT TTC TCA GC	Hamby et al. 1988 in Cox et al. 2000
18S (nr)	18J	forward	5' -TCT AAG GGC ATC ACA GAC CTG TTA TTG	Hamby et al. 1988 in Cox et al. 2000
18S (nr)	18Q	forward	5' -CAT TCA ATC GGT AGG AGC	Hamby et al. 1988 in Cox et al. 2000
18S (nr)	NS1	forward	5' -GTA GTC ATA TGC TTG TCT C	Hedderson, pers. comm., in Cox et al. 2000
18S (nr)	18ERC	reverse	5' -TCT GCC CTA TCA ACT TTC GAT GGT A	Hamby et al. 1988 in Cox et al. 2000
18S (nr)	18GRC	reverse	5' -AGG GCA AGT CTG GTG CCA	Hamby et al. 1988 in Cox et al. 2000
18S (nr)	18KRC	reverse	5' -GCA CGC GCG CTA CAC TGA	Hamby et al. 1988 in Cox et al. 2000
18S (nr)	PCRB	reverse	5' -TGA TCC TTC CGC AGG TT	Hedderson, pers. comm., in Cox et al. 2000
26S (nr)	LS OF	forward	5' -ACC CGC TGT TTA AGC ATA T	Manos lab in Shaw 2000
26S (nr)	D2 B	reverse	5' -TTT CAA GAC GGT CGG ATG AA	Boisselier-Dubayle, Lambourdiere & Bischler, 2002
26S (nr)	D2 LVWT	reverse	5' -TTT CAA GAC GGG TCG GAT G	Forrest, modified from Boisselier-Dubayle et al., 2002
26S (nr)	LS 12R	reverse	5' -ATC GCC AGT TCT GCT TAC CA	Manos lab in Shaw 2000
26S (nr)	LS 8R	reverse	5' -TGC TCA CAC TCG AAC CCT TC	Manos lab in Shaw 2000
atpB (cp)	1163F	forward	5' -ATG GCA GAA TRT TTC CGA GAT RTY A	Wolf (http://bioweb.usu.edu/wolf/atpB%20primer%20map.htm)
atpB (cp)	672F	forward	5' -TTG ATA CGG GAG CYC CTC TWA GTG T	Wolf (http://bioweb.usu.edu/wolf/atpB%20primer%20map.htm)
atpB (cp)	atpB LVWT 3F	forward	5' -TGG ATT GTR GGY GAG ARG ARC ATT A	Forrest 2004
atpB (cp)	384R	reverse	5' -GAA TTC CAA ACT ATT CGA TTA GG	Wolf (http://bioweb.usu.edu/wolf/atpB%20primer%20map.htm)
atpB (cp)	910R	reverse	5' -TTC CTG YAR AGA NCC CAT TTC TGT	Wolf (http://bioweb.usu.edu/wolf/atpB%20primer%20map.htm)
atpB (cp)	atpB LVWT 3R	reverse	5' -TCY TCR CCY ACA ATC CAR GGT TG	Forrest 2004
nad5 (mt)	K	forward	5' -ATA TGT CTG AGG ATC CGC ATA G	Beckert, Steinhauser, Muhle & Knoop, 1999
nad5 (mt)	K2	forward	5' -AGT AGC TTR GTY CAT MTT TAT TC	Beckert, Steinhauser, Muhle & Knoop, 1999
nad5 (mt)	Ki	forward	5' -ACT YGG TTA CCY GAT GCA ATG GAG GGT	Beckert, Steinhauser, Muhle & Knoop, 1999
nad5 (mt)	Li F	forward	5' -CCA GTA TCC GCT TTG ATT CAY GCA GC	Forrest modification from Beckert, Steinhauser, Muhle & Knoop, 1999
nad5 (mt)	L	reverse	5' -AAC TTT GGC CAA GGA TCC TAC AAA	Beckert, Steinhauser, Muhle & Knoop, 1999
nad5 (mt)	Le	reverse	5' -CAT ATC TTG CTC ATC CGA CAT GGC ATG	Beckert, Steinhauser, Muhle & Knoop, 1999
nad5 (mt)	Li	reverse	5' -GCT GCR TGA ATC RAA GCR GAT ACT GG	Beckert, Steinhauser, Muhle & Knoop, 1999
psbA (cp)	501F	forward	5' -TTT CTC AGA CGG TAT GCC	Cox (pers. comm.)
psbA (cp)	trnK2F	forward	5' -GAC GAG TTC CGG GTT CGA	Cox (pers. comm.)

psbA (cp) 576R	reverse	5' -TGG AAT GGG TGC ATA AGG	Cox (pers. comm.)
psbA (cp) trnHR	reverse	5' -GAA CGA CGG GAA TTG AAC	Cox (pers. comm.)
rbcL (cp) M007F	forward	5' -CCA CAA ACG GAG ACT AAA GC	Wheeler, pers. comm., in La Farge et al. 2000
rbcL (cp) M636	forward	5' -GCG TTG GAG AGA TCG TTT CT	Lewis et al. 1997 in Cox et al. 2000
rbcL (cp) NM34	forward	5' -GTT GTT GGA TTT AAA GCT GGT GTT	Wheeler, pers. comm., in Cox et al. 2000
rbcL (cp) M745R	reverse	5' -CTT CAC AWG TAC CTG CRG TAG C	Lewis et al. 1997 in Cox et al. 2000
rbcL (cp) MtmRR	reverse	5' -GCT CTA ATC CAC TGA GCT AC	Wheeler, pers. comm., in Cox et al. 2000
rps4 (cp) rps5	forward	5' -ATG TCC CGT TAT CGA GGA CCT	Nadot et al., 1994, in Cox et al. 2000
rps4 (cp) trnas	reverse	5' -TAC CGA GGG TTC GAA TC	Baker, pers. comm., in Cox et al. 2000
trnL (cp) trnC (B49317)	forward	5' -CGA AAT CGG TAG ACG CTA CG	Taberlet et al. 1991, in Cox et al. 2000
trnL (cp) trnF (A50272)	reverse	5' -ATT TGA ACT GGT GAC ACG AG	Taberlet et al. 1991, in Cox et al. 2000
trnL (cp) trnL FOSS	reverse	5' -TCA CGG TCA AGC CAA CGG AT	Forrest (2004)
trnL (cp) trnL LVWT	reverse	5' -GGR TAG AGG GAC TTG AAC	Forrest (2004)
