

14 Appendix

Table 2-1. Voucher information for species from which ITS1 sequences were generated. BSB = Institut für Biologie, Systematische Botanik und Pflanzengeographie, Freie Universität Berlin, Germany and M = Botanische Staatssammlung München, Germany.

BSB accession number	Species	Voucher	Source	GenBank accession number (ITS1) ^a
6B	<i>Ceballosia fruticosa</i> (L.f.) G. Kunkel var. <i>angustifolia</i> (Lam.) G. Kunkel	Hilger anno 1986 s.n. (BSB)	Spain: Tenerife	GBAN-AF396910
433	<i>Ehretia macrophylla</i> Wall. (as <i>Ehretia dicksonii</i> Hance)	cult. Tsukuba Botanical Garden, Japan (BSB, AFE- coll.)	Japan	GBAN-AF385800
543	<i>Ehretia acuminata</i> R. Br. (as <i>Ehretia ovalifolia</i> Hassk.)	cult. Kyoto Prefectural Botanical Garden, Japan (BSB, AFE-coll.)	Japan	GBAN-AF385799
16	<i>Heliotropium aegyptiacum</i> Lehm.	Schultka 1995/5 (BSB)	Kenya	GBAN-AF396918
605	<i>Heliotropium amplexicaule</i> Vahl	Jenny 6.1.1991 s.n. (BSB)	Argentina	GBAN-AF396906
454	<i>Heliotropium angiospermum</i> Murray	Hilger Cuba_99/44 (BSB)	Cuba	GBAN-AF396907
442	<i>Heliotropium antillanum</i> Urb.	Hilger Cuba_99/26 (BSB)	Cuba	GBAN-AF396891
606	<i>Heliotropium arbainense</i> Fresen.	Förther 4049 (BSB)	Egypt	GBAN-AF396916
563	<i>Heliotropium arborescens</i> L.	commercial cultivated plant	not indicated	GBAN-AF396896
443	<i>Heliotropium bursiferum</i> Wr. ex Griseb.	Hilger Cuba_99/25 (BSB)	Cuba	GBAN-AF396888
207	<i>Heliotropium campestre</i> Griseb.	Jenny 37 (BSB)	Argentina	GBAN-AF396887
515	<i>Heliotropium chrysanthum</i> Phil.	Hilger Arg_95/92 (BSB)	Argentina	GBAN-AF396894
232	<i>Heliotropium curassavicum</i> L.	Hilger Arg_95/82 (BSB)	Argentina	GBAN-AF396898
3B	<i>Heliotropium curassavicum</i> L. subsp. <i>oculatum</i> (A. Heller) Thorne	Hilger USA_94/21 (BSB)	USA	GBAN-AF396897
211	<i>Heliotropium digynum</i> (Forrsk.) Asch. ex C. Chr.	Hilger Israel_94/23 (BSB)	Israel	GBAN-AF396915
111	<i>Heliotropium europaeum</i> L.	cult. Botanical Garden Berlin- Dahlem, Germany (BSB, AFE- coll.)	not indicated	GBAN-AF396914
607	<i>Heliotropium giessii</i> Friedr.-Holzh.	Hilger Nam_93/3 (BSB)	Namibia	GBAN-AF396917
692	<i>Heliotropium hirsutissimum</i> Grauer	Kagiampaki 24.07.2000 s.n. (BSB)	Greece: Crete	GBAN-AF396912
673	<i>Heliotropium humifusum</i> Kunth	Löschner March 2000 s. n. (BSB)	Cuba	GBAN-AF396890
233	<i>Heliotropium krauseanum</i> Fedde	Weigend & Förther 97/727	Peru	GBAN-AF396909

BSB accession number	Species	Voucher	Source	GenBank accession number (ITS1) ^a
205	<i>Heliotropium mandonii</i> I.M.Johnst.	Weigend, cult. Botanical Garden of München-Nymphenburg, Germany 1.9.1997 (BSB, AFE-coll.)	Ecuador	GBAN-AF396895
235	<i>Heliotropium mendocinum</i> Phil.	Hilger Arg_95/77 (BSB)	Argentina	GBAN-AF396893
690	<i>Heliotropium microstachyum</i> Ruiz & Pav.	Weigend et. al. 97/320 (BSB)	Peru	GBAN-AF396908
608	<i>Heliotropium oliverianum</i> Schinz	Hilger Nam_93/16 (BSB)	Namibia	GBAN-AF396913
12B	<i>Heliotropium ovalifolium</i> Forssk.	Hilger Nam_93/5 (BSB)	Namibia	GBAN-AF396886
210	<i>Heliotropium procumbens</i> Mill.	Feuerer 9452b (BSB)	Bolivia	GBAN-AF396885
16B	<i>Heliotropium rariflorum</i> Stocks subsp. <i>hereroense</i> (Schinz) Verdc.	Hilger Nam_93/23 (BSB)	Namibia	GBAN-AF396889
204	<i>Heliotropium suaveolens</i> M. Bieb.	Hilger Bg_97/5 (BSB)	Bulgaria	GBAN-AF396911
350	<i>Heliotropium supinum</i> L.	Hilger anno 1985 s.n. (BSB)	Sizilien	GBAN-AF396919
611	<i>Heliotropium transalpinum</i> Vell.	Hilger Arg_95/23 (BSB)	Argentina	GBAN-AF396904
176	<i>Ixorhea tschudiana</i> Fenzl	cult. Botanical Garden of München-Nymphenburg, Germany (BSB, AFE-coll.)	Argentina	GBAN-AF396880
708	<i>Schleidenia lagoensis</i> Warm.	Schessl 2831 (M)	Brazil	GBAN-AF396892
687	<i>Tournefortia argentea</i> L.f.	Tillich 3555 (M)	Mauritius	GBAN-AF396900
688	<i>Tournefortia glabra</i> L.	cult. Botanical Garden of München-Nymphenburg, Germany	Ecuador	GBAN-AF396902
441	<i>Tournefortia gnaphalodes</i> (L.) Kunth	Hilger Cuba_99/34 (BSB)	Cuba	GBAN-AF396903
74	<i>Tournefortia hirsutissima</i> L.	Stenzel 96/32 (BSB)	Cuba	GBAN-AF396901
601	<i>Tournefortia luzonica</i> I.M. Johnst.	Liede 3302 (BSB)	Philippines	GBAN-AF396899
686	<i>Tournefortia microcalyx</i> (Ruiz & Pav.) I.M. Johnst.	Weigend & Dostert 97/5 (M)	Peru	GBAN-AF396905
718	<i>Tournefortia psilostachya</i> Kunth	Weigend & Weigend 2000/339 (M)	Peru	GBAN-AF396883
719	<i>Tournefortia salzmännii</i> DC.	Franca & Melo 16843 (M)	Brasil	GBAN-AF396884
147	<i>Tournefortia volubilis</i> L.	Hilger 09/80 (BSB)	Mexico	GBAN-AF396882
689	<i>Tournefortia volubilis</i> L.	cult. Botanical Garden of München-Nymphenburg, Germany	not indicated	GBAN-AF396881

^a The prefix GBAN- has been added to each accession number to link the online version of *American Journal of Botany* to GenBank, but is not part of the actual accession number.

Table 2-2. Alignment (data matrix) of the ascertained sequences inclusive additional set of characters to signify the presence or absence of seven characteristic informative deletions.

	1	11	21	31	41	51
Emacro433						
Eacumi543	TCGAACCCTG	CGAAGGCAGA	ACGACCTGCG	AACCCGTTT-	-AAACAATGC	GGGG----CC
Ixorhe176	TCGAATCCTG	CAAAAAGCAGA	ACGACCCGCG	AACCTGTTT-	--AACACCAC	TGGG----TT
Tvolub689	TCGAATCCTG	T-----C-GA	ACGACCCGCG	AACACGTTCT	--ACCACC--	GGG-T---CC
Tvolub147	TCGAATCCTG	T-----C-GA	ACGACCCGCG	AACACGTTCT	--ACCACC--	GGG-T---CC
Tpsilo718	TCGAATCCTG	-----CAGA	ACGACCCGCG	AACACGTTCT	--ATCACC--	GGG-T---CC
Tsalzm719	TCGAATCCTG	T-----C-GA	ACGACCCGCG	AACACGTTCT	--ATCACC--	GGG-T---CC
Hprocu210	TCGAATCCTG	CAAAAGCAGA	ACGACCAGCG	AACCCGTATT	--AACTGCTC	GGGA----TC
Hovali12B	TCGAATCCTG	CAAA-GCAGA	ACGACCAGCG	AACCCGTATT	--AACTGCTC	GGGA----TC
Hcampe207	TCGAATCCTG	CAAA-GCAGA	ACGACCAGCG	AACCCGTTTT	--AACTACTC	GGGA----TC
Hbursi443	TCGAATCCTG	CAAA-GCAGA	ACGACCAGCG	AACTGTCTCT	--AACCGCTC	GCGAG---TC
Hrarif16B	TCGAATCCTG	CAAA-GCAGA	ACGACCAGCG	AACCCGTTTT	--ATCTTCCC	GGGAG----C
Hhumif673	TCGAATCCTG	CAAA-GCAGA	ACGACCAGCG	AACCCGTTTT	--AACTTCTC	GCGAG----C
Hantil442	TCGAATCCTG	CAAA-GCAGA	ACGACCCGCG	AACCAGTTTT	--AACCGCTC	GGGA----C
Slagoe708	TCGAATCCTG	CAAA-GCAGA	ACGACCCGCG	AACCAGTTTT	--AACCGCTC	GGGAG----C
Hmendo235	NNNATCCTG	CAAA-GCAGA	ACGACCCGCG	AATCTGTTTT	--AACCGTTC	GGGG---AC
Hchrys515	TCGAATCCTG	CAAA-GCAGA	ACGACC-GCG	AATCTGTTTT	--AACCGTTC	GGGG----C
Hmando205	TCGAATCCTG	CACA-GCAGA	ACAACCCGCG	AAC--GTT-C	AAAACA---C	GAGGG-CCGC
Harbor563	TCGAATCCTG	CACA-GCAGA	ACAACCCGCG	AAC--GTT-C	AAAACA---C	GAGGG-CCGT
Hoculat3B	TCGAATCCTG	CAAA-GCAGA	ACAACCCGCG	AACACGTTTC	C-AACA---C	-AGGTGCCTC
Hcuras232	TCGAATCCTG	CAAA-GCAGA	ACAACCCGCG	AACACGTTTC	CC-ACA---C	-AGGTGCCTC
Tluzon601	TCGAATCCTG	CAAA-GCAGA	ACGACCCGCG	AACACGTTTC	C-AACA---C	-AGGGTCCTC
Targen687	TCGAATCCTG	CAA-GGCAGA	ACCACCAGCG	AACAAGTTTC	C-AACA---C	-AGGGTCCCC
Thirsut74	NCGAATCCTG	CAAA-GCAGA	ACGACCCGCG	AACACGTTTC	-AAACA---C	-AGGGTCCTC
Tglabr688	NCGAATCCTG	CAAA-GCAGA	ACGACTCGCG	AACGTGTTTC	C-AACA---C	-AGG-TCCTC
Tgnaph441	TCGAATCCTG	CAAA-GCAGA	ACGACCCGCG	AACACGTTTC	C-AACAA--C	GACG--CCTC
Htrans611	TCGAATCCTG	CAAA-GCAGA	ACGACCCGCG	AACACGTT-C	AAAACA---C	GAGG-CCCTC
Tmicro686	TCGAATCCTG	CAAA-GCAGA	ACAACCCGCG	AACACGTTTC	C-ACCA---C	C-GGGTCCTC
Hample605	NNNAATCCTN	NAAA-GCAGA	ACGACCCGCG	AACACGTTTC	--AA-TT--C	AACGG-ACTC
Hangio454	TCGAATCCTG	CAAA-GCAGA	ACGACCCGCG	AACACGTTTC	T-AACA---C	AAGGG-CCTC
Hmicro690	TCGAATCCTG	CAAA-GCAGA	ACGACCCGCG	AACACGTTTC	-AAACA---C	-AGGGTCCAT
Hkraus233	TCGAATCCTG	CAAA-GCAGA	ACGACCCGCG	AACACGTTTC	-AAACTT--C	AAGGG-CCTC
Cfrutic6B	TCGAATCCTG	CAAA-GCAGA	ACGACCCGCG	AACACGTTCC	-AAACA---C	C-GGG-CCTC
Hsuave204	TCGAATCCTG	GAACAGCAGA	ACGACCCGCG	AACACGTTCC	G-AACA---C	CGGGG-CCTC
Hhirsu692	TCGAATCCTG	CAACGGCAGA	ACGACCCGCG	AACACGTTCC	G-AACA---C	CGGGG-CCTC
Holive608	NNGAACCCTG	CAACAGCNA	ANNNCCGCG	AACACGTTCC	G-AACA---C	CGGGG-CCTC
Heurop111	TCGAACCCTG	CAACGGCAGA	ACGACCCGCG	AACACGTTCC	G-AACA---C	GGGGG-CCTC
Hdigyn211	TCGAACCCTG	CAACCGCAGA	ACGACCCGCG	AACACGTTCC	G-AACA---C	CGGGG-CCTC
Harbai606	NNGAACCCTG	CAANNNCAGA	ACGACCCGCG	AACACGTTCC	G-AACAA--C	-GGGG-CCTC
Haegypt16	TCGAATCCTG	CGAGAGCAGA	ACGACCCGCG	AACACGTTCC	G-AACA---C	CGGGG-CCCG
Hgiess607	TCGAATCCTG	CAACAGCAGA	ACGACCCGCG	AACACGTTCC	G-AACA---C	CGGGG-CCCA
Hsupin350	TCGAATCCTG	CAAA-GCAGA	ACGACCCGCG	AACACGTTCC	G-AACA---C	CGGGG-CCTC

	61	71	81	91	101	111
Emacro433	GACGC-GGG-	-GGAGGCGGC	TCGTCCCCA-	GCCCGCG---	---TGT----	-CGGT-CCCG
Eacumi543	GACGC-GGG-	-GGAGGCGGC	TCGTCCCCA-	GCCCGCG---	---CGT----	-CGGT-CCCG
Ixorhel176	GGGGC----T	TGGAA-CGG-	T-----AA	-CCCGTGCCA	---CGT--CT	-CGGT--CCG
Tvolub689	GGTGCCGGGT	-GG---CGGC	TCTT----A-	G-CCGTTTCG	---CGT-CCT	CCGGTCCCC-
Tvolub147	GGTGCCGGGT	-GG---CGGC	TCTT----A-	G-CCGTTTCG	---CGT-CCT	CCGGTCCCC-
Tpsilo718	GGTGCCGGGT	-GG---CGGC	TAGT----A-	G-CCGTTTC	---CGT-CCT	CCGGTCCCC-
Tsalzm719	GGTGCCGGGT	-GG---CGGC	TGTT----A-	G-CCGTTTCG	---CGT-CCT	CCGGTCCCC-
Hprocu210	GGT-C-GGGT	-GT---CGGC	-----AC	G-CCGT-CA-	TT-CG---CT	CCGGT-CCC-
Hovali12B	GGT-C-GGGT	-GT---CGGC	-----AC	G-CCGT-CA-	TTCC---CT	CCGGT-CCC-
Hcampe207	GGT-C-GGGT	-G-A---CGGC	-----AC	G-CCGT-C--	TTCCGT---T	CCGGT-CCC-
Hbursi443	GG----GGGT	-GGA---CGGC	-----AC	G-CCGT-C--	TTCCC---CT	CCGGT-CGTG
Hrarif16B	GGA-C--GGT	-CGA---CGGC	-----AC	G-CCGT-C--	--CC---AT	CCGGT-CGT-
Hhumif673	GGA-C--GGT	-GGA---CGGC	-----AT	G-CCGT-CC-	-TCC-T--CT	CCGCT-CGTG
Hantil442	GGA-C-GGGT	GGGA--CGGC	-----CT	--CCGT-C-G	-TCCTCC-GA	CCGTT-CCCG
Slage708	GGA-C--GGT	-CGA---CGGC	-----TC	G-CCTT-CC-	-TCCGCCCG-	--TTT-CCCG
Hmendo235	GGA-C-TGGT	-----	-----	-----CC-	-TCCGTTCGT	CC--T-CCCG
Hchrys515	GGA-C-TGGT	-----	-----	-----CC-	-TCCGTTCGT	CC--T-CCC-
Hmando205	GG--C-GGGG	---AG-----	-----	-----AC-	--CCGTCCC-	--GG-CCCC-
Harbor563	GG--C-GGGG	---AG-----	-----	-----CC-	--CCGTCCC-	--GG-CCCC-
Hoculat3B	AGT---GGCG	---AG-CGGC	T-----T	G-CCGTGAA-	--CCACT-GT	--GG--CCC-
Hcuras232	AGT---GGCG	---AG-CGGC	T-----T	G-CCGTGA-G	--CCAGT-GA	--GG--CCC-
Tluzon601	GG--C-GGGG	---AG-CGGC	T-----AT	--CCGTGAA-	--CCGTC-GT	--TG--CCCG
Targen687	AG--C-GGGG	---AG-CGGC	T-----T	G-CCGTGAA-	--CCGTC--T	C-GG--CCCA
Thirsut74	GG--C-GGGG	---AA-CGGC	T-----AT	--CCGTGAA-	--CCGTC-GT	C--G--CCCG
Tglabr688	GG--C-AGC-	---AAGCGGC	T-----AT	--TCGTGAA-	--CTGTT-GT	--AG--CCTG
Tgnaph441	GG--C-GGGG	---AG-CGGC	T-----T	G-CCGTAA-	--CTGTT-GC	--GG--CCCG
Htrans611	G-T-C-GGGG	---AG-CGGC	T-----A-	G-CCGCGAA-	--CCGCC-GT	--GG--GCC-
Tmicro686	GG--C-GGGG	---AG-CGGC	T-----AT	--CCGTGAA-	--CCGTC-GT	--GG--CCCG
Hample605	G-T-C-GGGG	---AA-CGGC	T-----A-	G-CCGTGAA-	--CCGTC-GT	--GG--CCCG
Hangio454	GA--C-GGGG	---AG-CGGC	T-----A-	G-CCGTGAA-	--CCATC-GC	--GG-CCCC-
Hmicro690	G-T-C-GGGG	---AG-CGGC	T-----A-	G-CCGTTC-G	--CCGTC-GT	--GG--CCC-
Hkraus233	GA--C-GGCG	---AG-CGGC	T-----A-	G-CCGTGAA-	--CCGTCC-T	--GG--CCC-
Cfrutic6B	GG--C-GGCG	---AG-CGGC	T-----A-	GCCCGTAA-	--CCGCC-GT	--TG-CCCC-
Hsuave204	-----	-----	-----	-----	-----	--GG--CCCG
Hhirsu692	-----	-----	-----	-----	-----	--GG-CCCG
Holive608	-----	-----	-----	-----	-----	--GG-CCCG
Heurop111	C-----	-----	-----	-----	-----	--GG--CCG
Hdigyn211	-----	-----	-----	-----	-----	--GG--CCCG
Harbai606	-----	-----	-----	-----	-----	--GG-CCCG
Haegypt16	-----	-----	-----	-----	-----	--GG-CCCG
Hgiess607	-----	-----	-----	-----	-----	--GG-CCCG
Hsupin350	-----	-----	-----	-----	-----	---G--CCCG

	121	131	141	151	161	171
Emacro433	A---TCG-GG	CGAA-CGCCC	CG-AAAC-AA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Eacumi543	A---TCG-GG	CGCA-CGCCC	CGCAAAG-AA	C-GAAGCCC-	GGCGCGGAAC	GCGCCAAGGC
Ixorhe176	AA-GTCAGGG	CGCAT-GCCT	TGCAAAC-AA	C-AAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Tvolub689	ATGACTGAGG	CCGAAAGCCC	-GCC-A-AAA	CTGAACCCC-	GGCGCGGAA-	GCGCCAAGGA
Tvolub147	ATGACTGAGG	CCGAAAGCCC	-GCC-A-AAA	C-GAACCCC-	GGCGCGTCCA	GCGCCAAGGA
Tpsilo718	CCGTC-GAGG	CCGAAAGCCC	CGCA-A-AAA	C-GAACCCC-	GGCGCGTCTA	GCGCCAAGGA
Tsalzm719	ATGAC-GAGG	CCGAAAGCCC	CGCC-A-AAA	C-GAACCCC-	GGCGCGTCCA	GCGCCAAGGA
Hprocu210	AA-GTCGGGG	CCTC-GGCCT	CG--AA-AAA	C-GAACCCC-	GGCGCGGAAA	GCGC-AAGGA
Hovali12B	AA-GTCGGGG	CCTC-GGCCT	CG--AA-AAA	T-GAACCCCC	GGCGCGGAAA	GCGCCAAGGA
Hcampe207	AA-GTCGGGG	CCTC-GGCC	CG--AA-AAA	T-GAACCCCC	GGCGCGGCAA	GCGC-AAGGA
Hbursi443	A--GTCGGGG	CCTC-GGCCT	CG-AAAC-AA	C-GAACCC--	GGCGCGGACA	GCGCCAAGGA
Hrarif16B	---GTC----	CCG--TTG--	----AACAAA	C-GAACCCC-	GGCG--GG-CC	GCGCCAAGGA
Hhumif673	A--GTCGGGG	CCTC-GGCCT	CG-TAAC-AA	C-GAACCC--	GGCGCGGACA	GCGCCAAGGA
Hantil442	A--GTCGGGG	TCTC-GGCC	CG--AACAAA	C-TAACCCC-	-GCGCGGACA	GCGCCAAGGA
Slagoe708	A--GCCGGGG	CCTG-GGCC	CG--AACAAA	C-GAACCCC-	GGCGCGGACA	GCGCCAAGGA
Hmendo235	A--GTCGGGG	CCTC-GGTCC	CG--AACAAA	C-GAACCCC-	-GCGCGGACA	GCGCCAAGGA
Hchrys515	AATGTCGGGG	CCTC-GGTCC	CG--AACAAA	C-GAACCCC-	-GCGCGGACA	GCGCCAAGGA
Hmando205	AT-GTCGGGG	TGCG-AGCCC	CGGCAACAAA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Harbor563	ATGTTCGGGG	TGCG-AGCCC	CGGCAACAAA	C-GAACCCC-	-GCGCGGAAT	GCGCCAAGGA
Hoculat3B	AACGTCGGGG	TGCA-AGCCC	CGC--ATAAA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Hcuras232	AATGTCGGGG	TGCA-AGCCT	CGC--ATAAA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Tluzon601	AATGTCGGGG	TGCA-AAACC	CGC-AA-AAA	C-GAACCCC-	GGCACGGAAT	GTGCCAAGGA
Targen687	GAT-TCGGGG	CTCA-AGCCC	CGC-AA-AAA	C-GAACCTC-	GGCGCGAAAT	GCGCCAAGTA
Thirsut74	AATGTCGGGG	TGCA-AGCCC	CGCC-A-AAA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Tglabr688	AA-GTCGGGG	TGCA-AGCCC	CGC-AA-AAA	C-GAACCCA-	GGCGCGGAAT	GCGCCAAGGA
Tgnaph441	TA-GTCGGGG	TGCA-AGCCC	CGC-AA-AAA	C-GAACCCC-	GGCGCGGAAC	GCGCCAAGGA
Htrans611	AAAGTCGGGG	CGAA-AGCCC	CGC-AA-AAA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Tmicro686	AA-GTCGGGG	TGCA-AGCCC	CGC-AA-AAA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Hample605	AA-GTCGGGG	TGCA-AGCCC	CGC--A-AAA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Hangio454	AA-GTCGGGG	TGCA-AGCCC	TGC-AA-AAA	T-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Hmicro690	AAAGTCGGGG	TGAA-AGCCC	CGC--A-AAA	T-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Hkraus233	AAAGTCGGGG	CGCA-AGCCC	CGC-AA-AAA	T-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Cfrutic6B	AA-GTCGGGG	TGCA-AGCCC	CGCC-A-AAA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Hsuave204	AAAGCCGGGG	CGCA-AGCCT	TGC--ATAAA	C-CAACCCC-	-GCCCGGAAT	TCGCCAAGGA
Hhirsu692	ACAGCCGGGG	CGCA-AGCCC	CGC-AA-AAA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Holive608	AA-GCCGGGG	CGCA-AGCCC	CGCAAA-AAA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Heurop111	AATGCCGGGG	CGCG-AGCCC	CGGAAA-AAA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Hdigyn211	AA-GCCGGGG	CGCG-AGCCC	CGC-AA-AAA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Harbai606	AA-GCCGGGG	CGCG-AGCCC	CGC-AA-AAA	C-GAACCCC-	-GCGCGGAAT	GCGCCAAGGA
Haegypt16	AA-GCCGGGG	CGCG-AGCCC	CGCAAA-AAA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Hgiess607	AA-GCCGGGG	CGCG-AGCCC	CGCAAA-AAA	C-GAACCCC-	GGCGCGGAAT	GCGCCAAGGA
Hsupin350	A----CGGGG	-GCG-AGCCC	C----AAAAA	T-GAACCCC-	-GCGCGGAAT	GCGCCAAGGA

	181	191	201	211	221	231
Emacro433	AAACGACAAA	-T--GGGGG-	CCAGCCT---	AC--CCGTGC	CCCGTCCGCG	GTGTGCCGGG
Eacumi543	AAACGA--AA	-TACGAGGGA	CCTGCCT---	AT--CCGTGC	CCCGTCCGCG	GTGTGCCGGG
Ixorhe176	AAAC-TATAA	ATACGAGGG-	CCAGCCT--T	-TTCCCGT--	-CCGTTCGCG	GGGCGCGGGA
Tvolub689	AAAC-TAAAA	A-ATGAGGGA	ACGGTC-CCT	-TCCTCG--C	CCCGTCCGCG	GGCAGCGGGG
Tvolub147	AAAC-TAAAA	A-ATGAGGGA	ACGGTC-CCT	-TCCCCG--C	CCCGTCCGCG	GGCAGCGGGG
Tpsilo718	AAAC-TAAAA	A-ATGAGAGC	ACGGTC-CCT	-TCCCCG--C	CCCGTCCGCG	GGAAGCGGGG
Tsalzm719	AAAC-TAAAA	AAATGAGGGA	ACGGTC-CCT	-TCCCCG--C	CCCGTCCGCG	GGCAGCGGGG
Hprocu210	ATACCTAAAA	---CGAGGG-	CC--TCCCC	-TTCCCGTG-	-CCGTTCGCG	-ACGTCGGGG
Hovali12B	ATACCTAAAA	---CGAGGG-	CC--TCCCC	-TCCCCGCG-	-CCGTTCGCG	GACTTCGGGG
Hcampe207	ATACCTAAAA	A--CGAGGG-	CC--TCCCC	-TTCCCGT--	CCCGTTCGCG	GGCATCGGGT
Hbursi443	ATACATAAAA	---CGAGGG-	CC--TCTCCC	-TTTCCGT--	CCCGTTCGCG	GAGCGCGGGT
Hrarif16B	ATACATAAAA	---CGAGGG-	CC--TCTCCC	-TCCCCGT--	CCCGTTCGCG	GAGCGCGGGG
Hhumif673	ATACATAAAA	---CGAGGG-	CC--TCTCCC	-TTCCCGT--	CCCGTTCGCG	GAGTACGGGT
Hantil442	ATACATAAAA	---CGAGGG-	CC--TCTCCC	-TCCCCGT--	CCCGTTC-CG	GAGCCCGGGG
Slagoe708	ATACCTAAAA	---CGAGGG-	CC--TCTCCC	-TCCCCGT--	CCCGTTCGCG	GAGCACGGGG
Hmendo235	ATACATTAA-	-TA-GAGGG-	CC--TCTCCC	-TCCCCGT--	CCCGTTCGCG	GGCAGCGGGG
Hchrys515	ATACATAAAA	---CGAGGG-	CC--TCTCCC	-TCCCCGT--	CCCGTTCGCG	GGCAGCGGGG
Hmando205	AAAC-TAAAA	---CGAGAG-	CC--TGCCCC	-TCCCCGT--	CCCGTTC-CG	GTGCGCGGGG
Harbor563	AAAC-TAAAA	---CGAGAG-	CC--TGCCCC	-TCCCCGT--	CCCGTTC-CG	GGGCGCGGGG
Hoculat3B	AAAC-TAAAA	---CGAGGG-	CC--TACCTC	AT-CCTGT--	CCCGTTCGCG	GAGCGCGGGT
Hcuras232	AAAC-TCAAA	---CGAGGG-	CC--TCCCC	AT-CCTGT--	CCCGTTCGCG	GAGCGCGGGT
Tluzon601	AAAC-TAAAA	---CGAGGG-	CC--TCCCAC	AT-CACGT--	CCCGTTCGCG	GAGCACGGGT
Targen687	AAAC-TAAAA	---CGAGGG-	CC--TCCCAC	AT-CCCGT--	CCCGTTCGCG	GAGCGCGGGT
Thirsut74	AAAC-TAAAA	---CGAGGG-	CC--TCCCAC	AT-CCCGT--	CCCGTTCGCG	GAGCGCGGGT
Tglabr688	AAAC-TTAAA	---CGAGGG-	CC--TCCCAC	AT-CCCGT--	CCCGTTCGCG	GAGTGCGGGT
Tgnaph441	AAAC-TAAAA	---CGAGAG-	CC--TCCCAC	AT-CCCGT--	CCCGTTCGCG	GACCGCGGGG
Htrans611	AAAC-TAA--	-TACGAGGG-	CC--CCCCAC	AT-CCCGT--	CCCGTTCGCG	GAGTGCGGGC
Tmicro686	AAAC-TAAAA	---CGAGGG-	CC--TCCCAC	AT-CCCGT--	CCCGTTCGCG	GAGCGCGGGT
Hample605	AAACATAAAA-	---CGAGGG-	CC--TCCCAC	AT-CCCGT--	CCCGTTCGCG	GAGTGCGGGT
Hangio454	AAAC-TGAAA	---CGAGAG-	CC--TCCCAC	AT-CCCGT--	CCCGTTC-CG	GAGCGCGGGT
Hmicro690	AAAC-TAAAA	-T--GAGGG-	CC--TCCCAC	AT-CCCGT--	CCCGTTCGCG	GATTGCGGGT
Hkraus233	AAAC-TAAAA	---CGAGGG-	CCTG-CCC--	ATCCCCGT--	CCCGTTCGCG	GAGCGCGGG-
Cfrutic6B	AAAC-TAA--	-TACGAGGG-	CCTG-CCT-C	-TCCCCGA--	CCCGT-CGCG	GATCGCGGGG
Hsuave204	AAAC-AAAAA	A--CGAGGG-	CC-GTCCT-C	-TCCCCGA--	CCCGTTCGCG	GTGCGCGGGG
Hhirsu692	AAACCAAAAA	---CGAGGG-	CC-GTCCT-C	-TCCCCGA--	CCCGT-CGCG	GTGCGCGGGG
Holive608	AAACCAAAAA-	---CGAGGG-	CCTG-CCT-C	-TCCCCGA--	CCCGT-CGCG	GGCCGCGGGG
Heurop111	AAACCAAAAA	---CGAGGG-	CCGG-CCT-C	-TCCCCGA--	CCCGTTCGCG	GTGCGCGGGG
Hdigyn211	AAACCAAAAA	---CGAGGG-	CC-GTCCT-C	-TCCCCGA--	CCCGT-CGCG	GTGCTCGGGG
Harbai606	AAACCAAAAA	---CGAGGG-	CC-GTCCT-C	-TCCCCGA--	CCCGTTCGCG	GTGCTCGGGG
Haegypt16	AAACCAAAAA	---CGAGGGC	CC--TCCC-C	-TCCCCGG--	CCCGTTCGCG	GGACGCGGGG
Hgiess607	AAACCAAAAA-	---CGAGGGC	CC-G-CCC-C	-TCCCCGG--	CCCGTTCGCG	GGACGCGGGG
Hsupin350	AAAC-TAAAA	A--C-AGGGC	CCGG-CC--C	-TCCCCGA--	CCCGTTC-CG	G-GCGCGGGG

	241	251	261	271	281
Emacro433	-TTAGGCC-T	CGGTC-CCTT	ACGAAACGAA	-AACGACTC	0000000
Eacumi543	-TTAGGCC-T	CGGTC-GCTT	ACGAAACGAA	-AACGACTC	0000000
Ixorhe176	-TTAGGTG-C	AGGCT-TCTT	TCGAAAC-AA	CAACGACTC	1000000
Tvolub689	-TC-GGT-CC	CGCTCCTT	TCTAAACTAA	-AACGACTC	0100000
Tvolub147	-TC-GGTC-C	CGCTCCTT	TCTAAACTAA	-AACGACTC	0100000
Tpsilo718	-TT-GGTC-C	CGCTCCTT	TCTAAACTGA	-AACGATCT	0100000
Tsalzm719	-TC-GGTC-C	CGCTCCTT	TCTAAACTAA	-AACGATCT	0100000
Hprocu210	-TGGGGAG-A	CGGCT-TCTT	TCGAAACAAA	CAACGACTC	0010000
Hovali12B	-TGGGGAG-A	CGGCT-TCTT	TCGAAACAAA	CAACGACTC	0010000
Hcampe207	-TGGTGTG-A	CGGCT-TCTT	TCGAAACAAA	CAACGACTC	0010000
Hbursi443	-TGGGAAG-A	CGGCT-TCTT	TCGAAACCAA	CAACGACTC	0010000
Hrarif16B	-TTGGGCG-A	TGGAT-TCTT	TTGAAATGAA	CAACGACTC	0010000
Hhumif673	-TGGGACG-A	CGGCT-TCTT	TTGAAACAAA	CAACGACTC	0010000
Hantil442	-TGGGGCG-A	CGGCT-CCTT	TCGAAACGAA	CAACGACTC	0010000
Slagoe708	-TGTGGCG-A	CGGCT-TCTT	TCGAAACGAA	CAACGACTC	0010000
Hmendo235	-TGGTGCG-A	CGGCT-CCTT	TCGAAACTTA	CAACGACTC	0001000
Hchrys515	-TGGTGCG-A	CGGCT-CCTT	TCGAAACTTA	CAACGACTC	0001000
Hmando205	-TGAGGTG-A	CGGCT-TCTT	TCGAAAC-AA	TAACAACCTC	0000100
Harbor563	-TGAGGTG-A	CGGCT-TCTT	TCGAAAC-AA	TAACAACCTC	0000100
Hoculat3B	-TGAGG-GTG	CGGCT-TCTT	TCGAAAC-AA	AAACAACCTC	0000010
Hcuras232	-TGAGG-GTA	CGGCT-TCTT	TCGAAAC-AA	AAACAACCTC	0000010
Tluzon601	-TGAGG-GTA	AGGCT-TCTT	TCAAAAC-AA	AAACAACCTC	0000010
Targen687	-TGAGG-GTA	CGGGT-CCTT	TAGAAAA-AA	AAACAACCTC	0000010
Thirsut74	-TGAGG-GTA	CGGCT-TCTT	TCGAAAC-AA	AAACAACCTC	0000010
Tglabr688	-TGAGG-GTA	AAGGCATCTT	TCGAAAC-AA	AAACAACCTC	0000010
Tgnaph441	-TGAGGCG-A	CGGCT-CATA	TCGAAAC-AA	AAACAACCTC	0000010
Htrans611	-TGAGG-GTA	GGGCT-CCTT	TCGAAAC-AA	AAACAACCTC	0000010
Tmicro686	ATGAGG-ATA	CGGCT-TCTT	TCGAAAC-AA	AAACAACCTC	0000010
Hample605	-TGTGGGGTA	AGGCT-TCTT	TCGAAAC-AA	AAACAACCTC	0000010
Hangio454	-TGAGGTG-A	TGGCT-TTTT	TCGAAA--AC	AAACAACCTC	0000010
Hmicro690	-TGCGGGGTA	AGGCT-TCTT	TCTAAAT-AA	AAACAACCTC	0000010
Hkraus233	CTGAGGTG-A	CGGCT-TCTT	TTGAAAC-AA	AAACAACCTC	0000010
Cfrutic6B	C-GAGGTG-A	CGGCT-TCTT	TCGAAAC-AA	AAACAACCTC	0000010
Hsuave204	C-GAGGCGT-	CGGCT-CCTT	TCGAAACGAA	-AACAACTC	0000001
Hhirsu692	C-GAGGCGT-	CGGCT-CCTT	TCGAAACGAA	-AACAACTC	0000001
Holive608	C-GAGGCGT-	CGGCT-CCTT	TCGAAACGAA	-AACAACTC	0000001
Heurop111	C-GAGGCGT-	CGGCT-CCTT	TCGAAACGAA	-AACAACTC	0000001
Hdigyn211	A-GAGGCGT-	CGGCT-CCTT	TCGAAACGAA	-AACAACTC	0000001
Harbai606	A-GAGGCGT-	CGGCT-CCTT	TCGAAACGAA	-AACAACTC	0000001
Haegypt16	C-GAGGCGG-	CGGCT-CCTT	TCGAAACGAA	-AACAACTC	0000001
Hgiess607	C-GAGGCG-A	CGGCT-CCTT	ACGAAACGAA	-AACAACTC	0000001
Hsupin350	C-GAGGCG-A	CGGCC-CCCT	CCGAAACGAA	-AACAACTC	0000001

Table 3-1. Species list. DNA-numbers follow an internal numbering code of the Institut für Biologie — Systematische Botanik und Pflanzengeographie (FU Berlin). Species with an asterisk (*) were obtained from GenBank (<http://www.ncbi.nlm.nih.gov/PubMed>). Abbreviations: B: Herbarium, Bot. Mus. Berlin-Dahlem; BSB: Herbarium, Inst. Syst. Bot., Freie Univ. Berlin.; CANB: Australian National Herbarium, Canberra; HB: Botanical Garden; n. ind.: not indicated; MO: Missouri Botanical Garden.

DNA No.	Species name with author	Collector/collection# (herbarium)	Location (State)	GenBank#
672	<i>Anchusa officinalis</i> L.	Hilger s.n. (B)	Germany	AY045710
*	<i>Atropa bella-donna</i> L.	n. ind.	n. ind.	AB019288 (TAGO 1999)
671	<i>Borago officinalis</i> L.	cult. Hilger 7/2000 (B)	Germany	AF402572
808	<i>Bourreria huanita</i> (Llav. & Lex.) Hemsl.	Sandoval 1159 (B, BSB)	El Salvador	AF402573
417	<i>Bourreria petiolaris</i> (Lam.) Thulin	Gachathi 76 (202) (B)	Kenya	AF385783
559	<i>Bourreria succulenta</i> Jacq.	Gottschling CUB13 (BSB)	Cuba	AF385776
662	<i>Buglossoides arvensis</i> (L.) I.M.Johnst.	Kagiampaki 5 (B)	Greece	AF402574
*	<i>Cerintho major</i> L.	n. ind.	n. ind.	L43200 (BÖHLE <i>et al.</i> 1996)
262	<i>Cordia bifurcata</i> Roem. & Schult.	Mehltreter ARG s.n. (BSB)	Argentina	AF402575
398	<i>Cordia collococca</i> L.	HB Berlin-Dahlem (B, BSB)	n. ind.	AF402576
451	<i>Cordia lenis</i> Alain	Hilger 18 (BSB)	Cuba	AF402577
*	<i>Cordia nodosa</i> Lam.	n. ind.	n. ind.	AF091153 (FERGUSON 1998)
377	<i>Cordia myxa</i> L.	HB Berlin-Dahlem (B, BSB)	n. ind.	AF402578
370	<i>Cordia sebestena</i> L.	HB Berlin-Dahlem (B, BSB)	n. ind.	AF402579
403	<i>Cordia subcordata</i> Lam.	HB Berlin-Dahlem (B, BSB)	n. ind.	AF385774
118	<i>Cordia trichotoma</i> Vell. ex Steud.	Hilger <i>et al.</i> ARG 95/58 (B)	Argentina	AF402580
*	<i>Cryptantha flavoculata</i> (Nelson) Payson	n. ind.	n. ind.	AF091154 (FERGUSON 1998)
323	<i>Cryptantha micrantha</i> (Torrey) I.M.Johnst.	Hofmann 18/98 (BSB)	USA (CA)	AF402581
646	<i>Cynoglossum officinale</i> L.	HB Berlin-Dahlem (B, BSB)	Germany	AF402582
*	<i>Echium giganteum</i> L.f.	n. ind.	Spain (Canary Islands)	L43224 (BÖHLE <i>et al.</i> 1996)
*	<i>Echium leucophaeum</i> Webb	n. ind.	Spain (Canary Islands)	L43240 (BÖHLE <i>et al.</i> 1996)

DNA No.	Species name with author	Collector/collection# (herbarium)	Location (State)	GenBank#
543	<i>Ehretia acuminata</i> R.Br.(as <i>E. ovalifolia</i> Hassk.)	HB Kyoto	Japan	AF385799
792	<i>Ehretia aquatica</i> (Lour.) Gottschling & Hilger	<i>Jongkind 2517</i> (MO)	Ghana	AF385791
415	<i>Ehretia laevis</i> Roxb.	<i>Rechinger 29501</i> (B)	Pakistan	AF385787
406	<i>Ehretia monopyrena</i> Gottschling & Hilger	HB Singapore	Singapore	AF385792
706	<i>Elizaldia calycina</i> (Roem. & Schult.) Maire	<i>Reading s.n.</i> (B)	Morocco	AF402583
*	<i>Emmenanthe penduliflora</i> Benth.	n. ind.	n. ind.	AF091158 (FERGUSON 1998)
*	<i>Eridictyon trichocalyx</i> A.A.Heller	n. ind.	n. ind.	AF091164 (FERGUSON 1998)
732	<i>Halgania andromedifolia</i> Behr. & F.Muell. ex F.Muell.	<i>Strid 21146</i> (B)	Australia	AF402584
751	<i>Halgania rigida</i> S.Moore	<i>Strid 21301</i> (B)	Australia	AF402585
563	<i>Heliotropium arborescens</i> L.	<i>Comm. cult.</i> (B)	Germany	AF396896
842	<i>Heliotropium asperrimum</i> R.Br.	<i>Craven 9671</i> (CANB)	Australia	AF402586
496	<i>Heliotropium europaeum</i> L.	<i>HB Berlin-Dahlem 97/6</i> (B, BSB)	Germany	AF402587
692	<i>Heliotropium hirsutissimum</i> Grauer	<i>Kagiampkai s.n.</i> (BSB)	Greece	AF396912
233	<i>Heliotropium krauseanum</i> Fedde	<i>Weigend & Förther 97/727</i> (BSB)	Peru	AF396909
3B	<i>Heliotropium curassavicum</i> L. subsp. <i>oculatum</i> (A.Heller) Thorne	<i>Hilger USA-94/21</i> (BSB)	USA (CA)	AF396897
838	<i>Heliotropium submolle</i> Klotzsch	<i>Weigend et al. 2000/809</i> (BSB)	Peru	AF402588
*	<i>Lennoa madreporoides</i> Llave & Lex.	n. ind.	n. ind.	AF091171 (FERGUSON 1998)
255	<i>Nama aretioides</i> (H.&A.) Brand	<i>Hilger et al. 264</i> (BSB)	USA (CA)	AF402589
281	<i>Nama demissum</i> A.Gray	<i>Hofmann 10/98</i> (BSB)	USA (CA)	AF402590
*	<i>Nama rothrockii</i> A.Gray	n. ind.	n. ind.	AF091179 (FERGUSON 1998)
*	<i>Nicotiana tabacum</i> L.	n. ind.	n. ind.	AJ300215 (MARSHALL 1999)
*	<i>Phacelia rotundifolia</i> Torrey ex S.Watson	n. ind.	n. ind.	AF091200 (FERGUSON 1998)
146	<i>Pholisma arenarium</i> Nutt. ex Hook.	<i>Hilger & Hofmann 1992/62</i> (BSB)	USA (CA)	AF402591
*	<i>Pholisma arenarium</i> Nutt. ex Hook.	n. ind.	n. ind.	AF091203 (FERGUSON 1998)

DNA No.	Species name with author	Collector/collection# (herbarium)	Location (State)	GenBank#
815	<i>Saccellium lanceolatum</i> Humb. & Bonpl.	Taylor, Múlgura, Deginani 11353 (MO)	Argentina	AF402592
601	<i>Tournefortia luzonica</i> I.M.Johnst.	Liede 3302 (BSB)	Philippines	AF396899
686	<i>Tournefortia microcalyx</i> (Ruiz & Pav.) I.M.Johnst.	Weigend & Dostert 97/5 (BSB)	Peru	AF396905
*	<i>Tricardia watsonii</i> Torrey ex S.Watson	n. ind.	n. ind.	AF091209 (FERGUSON 1998)
*	<i>Wigandia urens</i> (Ruiz & Pavon) Choisy	n. ind.	n. ind.	AF091212 (FERGUSON 1998)

Table 3-2. Statistics of the secondary structures proposed in this study.

Species	Length ITS1 (in bases)	Length stem- loop (in bases)	GC- content	Pairing G—U	Length helices (in pairing bases)				ΔG (20°C, in kcal/mol)
					I	II	III	IV	
<i>Nicotiana tabacum</i>	283	95	62 %	11 %	20	14	5	17	—90.7
<i>Borago officinalis</i>	271	74	46 %	27 %	17	10	5	19	—101.6
<i>Nama demissum</i>	263	99	63 %	18 %	18	6	6	20	—86.5
<i>Cordia sebestena</i>	267	81	60 %	14 %	19	6	5	25	—121.6
<i>Ehretia acuminata</i>	271	93	63 %	8 %	21	7	6	20	—96.7
<i>Heliotropium europaeum</i>	234	92	66 %	5 %	5	6	6	20	—105.5
<i>Pholisma arenarium</i>	270	73	55 %	10 %	17	6	5	22	—103.0

Table 4-1. Source of investigated seed samples. Voucher specimen are deposited in the Herbarium, Institut für Biologie, Systematische Botanik und Pflanzengeographie, Freie Universität Berlin (BSB); Herbarium of Botanical Garden and Botanical Museum of Berlin-Dahlem, Germany (B).

Species name	Collection
Boraginaceae s. str.	
<i>Anchusa strigosa</i> Banks & Sol.	Hilger 18/94 (BSB), Israel
<i>Borago pygmaea</i> (DC.) Chater & Greuter	BGBM (BSB), n. ind.
<i>Cynoglossum creticum</i> Mill.	Hilger 94/3 (BSB), Israel
<i>Echium vulgare</i> L.	BGBM (BSB), Germany
Cordiaceae	
<i>Cordia sebestena</i> L.	Gottschling 99/37 (BSB), Cuba
<i>Varronia bifurcata</i> (Roem. & Schult.) Borhidi	Weigend et al. 5751 (BSB), Peru
Ehretiaceae	
<i>Bourreria homalophylla</i> O.E.Schulz	Gottschling 99/6 (BSB), Cuba
<i>Bourreria ovata</i> Miers	Gottschling s.n. (BSB), Cuba
<i>Bourreria petiolaris</i> (Lam.) Thulin	Hilger & Schultka s.n. (BSB), Kenya
<i>Bourreria succulenta</i> Jacq.	Gottschling 99/37 (BSB), Cuba
<i>Ehretia acuminata</i> R.Br.	cult. HB Coot-tha (BSB), Australia
<i>Ehretia laevis</i> Roxb.	Rechinger 29501 (B), Pakistan
<i>Ehretia longiflora</i> Champ. ex Benth.	cult. HB Taiwan (BSB), Taiwan
<i>Ehretia microphylla</i> Lam.	cult. HB Singapore (BSB), Singapore
<i>Ehretia rigida</i> (Thunb.) Druce	Seydel 357 (B), Namibia
<i>Ehretia tinifolia</i> L.	Gottschling 99/52 (BSB), Cuba
<i>Tiquilia dichotoma</i> (Ruiz & Pavon) Pers.	Weigend & Förther 97/637 (BSB), Peru
<i>Tiquilia elongata</i> (Rusby) A.T.Richardson	Weigend & Förther 97/757 (BSB), Peru
<i>Tiquilia nuttallii</i> (Hook.) A.T.Richardson	Hilger & Hofmann 92/60 (BSB), USA
<i>Tiquilia paronychioides</i> (Phil.) A.T.Richardson	Weigend & Förther 97/759 (BSB), Peru
<i>Tiquilia plicata</i> (Torr.) A.T.Richardson	Hilger USA 94/6 (BSB), USA (Texas)
Heliotropiaceae	
<i>Heliotropium amplexicaule</i> Vahl	Hilger ARG 95/8 (BSB), Argentina
<i>Heliotropium angiospermum</i> Murray	Hilger 99/44 (BSB), Cuba
<i>Heliotropium antillanum</i> Urb.	Hilger 99/26 (BSB), Cuba
<i>Heliotropium bursiferum</i> C.Wright	Hilger 99/25 (BSB), Cuba
<i>Heliotropium chrysanthum</i> Phil.	Hilger et al. ARG 96/68 (BSB), Argentina
<i>Heliotropium ciliatum</i> Kaplan	Hilger 93/1 (BSB), Namibia
<i>Heliotropium elongatum</i> (Lehm.) I.M. Johnst.	Hilger et al. ARG 95/18 (BSB), Argentina

Species name	Collection
<i>Heliotropium erosum</i> Lehm.	Zippel 2000/69 (BSB), Spain (Gran Canaria)
<i>Heliotropium europaeum</i> L.	Hilger anno 1984 s.n. (BSB), Sicily
<i>Heliotropium humifusum</i> Humb., Bonpl. & Kunth	Hilger 99/3 (BSB), Cuba
<i>Heliotropium indicum</i> L.	Hilger 99/22 (BSB), Cuba
<i>Heliotropium nelsonii</i> C.H. Wright	Hilger 93/19 (BSB), Namibia
<i>Heliotropium nicotianaefolium</i> Poir.	Hilger et al. 95/38 (BSB), Argentina
<i>Heliotropium ovalifolium</i> Forssk.	Hilger 93/4 (BSB), Namibia
<i>Heliotropium procumbens</i> Mill.	Hilger et al. ARG 95/28 (BSB), Argentina
<i>Heliotropium transalpinum</i> Vell.	Hilger et al. ARG 95/17 (BSB), Argentina
<i>Heliotropium veronicifolium</i> Griseb.	Hilger ARG 95/29 (BSB), Argentina
<i>Ixorhea tschudiana</i> Fenzl	cult. BG München-Nymphenburg, Germany (BSB), Argentina
<i>Myriopus volubilis</i> (L.) Small	BGBM (BSB), n. ind.
<i>Tournefortia argentea</i> L.f.	Tillich anno 1996 s.n. (BSB), Mauritius
<i>Tournefortia glabra</i> L.	Hilger 99/3 (BSB), Cuba
<i>Tournefortia gnaphalodes</i> (L.) R.Br. ex Roem. & Schult.	Hilger 99/34 (BSB), Cuba
<i>Tournefortia tarmensis</i> (Krause) J.F. Macbr.	Weigend et al. 5668 (BSB), Peru
Hydrophyllaceae	
<i>Emmenanthe penduliflora</i> Benth.	Hilger & Hofmann 97/354 (BSB), USA (California)
<i>Nama demissum</i> A. Gray	Hofmann 98/10 (BSB), USA (California)
<i>Nemophila menziesii</i> Hook. & Arn.	Hofmann 98/32 (BSB), USA (California)
<i>Phacelia tanacetifolia</i> Benth.	Hofmann 1997 s.n. (BSB), Germany, cult. material
<i>Wigandia urens</i> (Ruiz & Pav.) Humb., Bonpl. & Kunth	Weigend et al. 5671 (BSB), Peru
Lennoaceae	
<i>Pholisma arenarium</i> Hook.	Hilger & Hofmann 92/62 (BSB), USA (California)

Table 5-2. List of species investigated, with location of voucher specimens, arranged in alphabetical order of the clades/ taxa according Table 5-1. (BSB) = Institut für Biologie, Systematische Botanik und Pflanzengeographie, Freie Universität Berlin, Germany; (M) = Botanische Staatssammlung München, Germany, (CANB) = Australian National Herbarium, Canberra, Australia

Clade – Taxon	Collection
ARGUSIA – <i>Argusia</i>	
<i>A. sibirica</i> (L.) Dandy (as <i>Tournefortia sibirica</i> L.)	Skvortsov 29.06.1963 s.n. (M), Russia
<i>A. sogdiana</i> (as <i>Messerschmidia sogdiana</i> (Bunge) H.Riedl)	Nikitin & Iwanow 28.?.1974 s.n.(M), Turkmenistan
CEBALLOSIA – <i>Ceballosia</i>	
<i>C. fruticosa</i> (L.f.) G.Kunkel var. <i>angustifolia</i> (Lam.) G.Kunkel	Hilger anno 1986 s.n. (BSB, AFE-coll.), Spain (Tenerife)
EUPLOCA	
<i>Heliotropium</i> sect. <i>Orthostachys</i>	
<i>H. bursiferum</i> Wr. ex Griseb.	Hilger Cuba_99/25 (BSB, AFE-coll.), Cuba
<i>H. campestre</i> Griseb.	N. De la Barra s.n. (BSB), Bolivia
<i>H. chrysanthum</i> Phil.	Hilger et al. Arg_95/92 (BSB, AFE-coll.), Argentina
<i>H. convolvulaceum</i> (Nutt.) A.Gray	Hilger & Hofmann USA_92/77 (BSB, AFE-coll.), USA (California)
<i>H. humifusum</i> Kunth	Hilger Cuba_99/1 (BSB, AFE-coll.), Cuba
<i>H. mendocinum</i> Phil.	Hilger et al. Arg_95/77 (BSB, AFE-coll.), Argentina
<i>H. ovalifolium</i> Forssk.	Hilger Nam_93/5 (BSB, AFE-coll.), Namibia
<i>H. procumbens</i> Mill.	Hilger et al. Arg_95/26 (BSB, AFE-coll.), Argentina
<i>H. rariflorum</i> Stocks subsp. <i>heroense</i> (Schinz) Verdc.	Hilger Nam_93/23 (BSB, AFE-coll.), Namibia
<i>H. strigosum</i> Willd.	Hilger Kenya_91/7 (BSB, AFE-coll.), Kenya
<i>H. styotrichum</i> Craven	Craven 9687 (CANB), Australia
<i>H. tenuifolium</i> R.Br.	Craven 9688 (CANB), Australia
<i>Hilgeria</i>	
<i>H. hypogaea</i> (Urban & Eckman) Förther	Briggs 226 (M), Cuba
<i>Schleidenia</i>	
<i>H. antillanum</i> Urb.	Hilger Cuba_99/26 (BSB, AFE-coll.), Cuba
HELIOTHAMNUS – <i>Heliotropium</i> sect. <i>Heliothamnus</i>	
<i>H. adenogynum</i> I.M.Johnst.	Cano 10058 (M), Peru
<i>H. arborescens</i> L.	commercial cultivated plant (BSB, AFE-coll.), not indicated
<i>H. incanum</i> Ruiz & Pav.	Weigend et al. 5818 (BSB, AFE-coll.), Peru
<i>H. mandonii</i> I.M.Johnst.	Weigend, cult. Botanical Garden of München-Nymphenburg, Germany 01.09.1997 (BSB, AFE-coll.), Ecuador

Clade – Taxon	Collection
<i>H. rufipilum</i> (Benth.) I.M.Johnst.	Förther et al. 10252 (MSB, AFE-coll.), Guatemala
<i>H. submolle</i> Klotzsch	Weigend & Skrabal 5890 (BSB, AFE-coll.), Peru
HELIOTROPIUM I – <i>Heliotropium</i> species of the New World	
<i>H. amplexicaule</i> Vahl	Hilger et al. Arg_95/70 (BSB, AFE-coll.), Argentina
<i>H. angiospermum</i> Murray	Hilger Cuba_99/44 (BSB, AFE-coll.), Cuba
<i>H. curassavicum</i> L.	Hilger et al. Arg_95/82 (BSB, AFE-coll.), Argentina
<i>H. elongatum</i> (Lehm.) I.M.Johnst.	Hilger et al. Arg_95/18 (BSB, AFE-coll.), Argentina
<i>H. indicum</i> L.	Hilger Cuba_99/22 (BSB, AFE-coll.), Cuba
<i>H. krauseanum</i> Fedde	Weigend & Förther 97/727 (BSB), Peru
<i>H. spec. nov. cf. krauseanum</i> Fedde	Weigend et al. 5887 (BSB, AFE-coll.), Peru
<i>H. microstachyum</i> Ruiz & Pav.	Hilger et al. Arg_95/54 (BSB, AFE-coll.), Argentina
<i>H. nicotianaefolium</i> Poir.	Hilger et al. Arg_95756 (BSB, AFE-coll.), Argentina
<i>H. paronychioides</i> A.DC.	Hilger et al. Arg_95/90 (BSB, AFE-coll.), Argentina
<i>H. patagonicum</i> (Speg.) I.M.Johnst.	Weigend et al. 5940 (BSB, AFE-coll.), Argentina
<i>H. pinnatisectum</i> R.L.Pérez-Mor.	Weigend et al. 5901 (BSB, AFE-coll.), Argentina
<i>H. transalpinum</i> Vell.	Hilger et al. Arg_95/23 (BSB, AFE-coll.), Argentina
<i>H. veronicifolium</i> Griseb.	Hilger et al. Arg_95/29 (BSB, AFE-coll.), Argentina
HELIOTROPIUM II	
<i>Heliotropium</i> species of the Old World	
<i>H. aegyptiacum</i> Lehm.	Schultka 1995/5 (BSB, AFE-coll.), Kenya
<i>H. arbainense</i> Fresen.	Hilger 23.05.1980 s.n. (BSB, AFE-coll.), Israel
<i>H. asperrimum</i> R.Br.	Craven 9671 (CANB), Australia
<i>H. ciliatum</i> Kaplan	Hilger Nam_93/10 (BSB, AFE-coll.), Namibia
<i>H. digynum</i> (Forrsk.) Asch. ex C.Chr.	Hilger Israel_94/23 (BSB, AFE-coll.), Israel
<i>H. erosum</i> Lehm.	Hilger 1986 s.n. (BSB, AFE-coll.), Spain (Tenerife)
<i>H. europaeum</i> L.	cult. Botanical Garden Berlin-Dahlem, Germany (BSB, AFE-coll.), not indicated
<i>H. giessii</i> Friedr.-Holzh.	Hilger Nam_93/3 (BSB, AFE-coll.), Namibia
<i>H. hirsutissimum</i> Grauer	Kagiampaki 24.07.2000 s.n. (BSB), Greece (Crete)
<i>H. nelsonii</i> C.H.Wright	Hilger Nam_93/6 (BSB, AFE-coll.), Namibia
<i>H. oliverianum</i> Schinz	Hilger Nam_93/16 (BSB, AFE-coll.), Namibia
<i>H. suaveolens</i> M.Bieb.	Raus & Schiers 19040 (B), Greece
<i>H. supinum</i> L.	Hilger anno 1985 s.n. (BSB, AFE-coll.), Italy: Sicily
<i>H. zeylanicum</i> (Burm.f.) Lam.	Hilger Kenya_91/3 (BSB, AFE-coll.), Kenya
<i>Nogalia</i>	
<i>N. drepanophyllum</i> (Baker) Verdc.	Kilian 6603 (BSB, AFE-coll.), Jemen

Clade – Taxon	Collection
IXORHEA – <i>Ixorhea</i>	
<i>I. tschudiana</i> Fenzl	Hilger Arg_95/65 (BSB, AFE-coll.), Argentina
MYRIOPUS – <i>Tournefortia</i> sect. <i>Cyphocyema</i>	
<i>T. psilostachya</i> Kunth	Weigend & Weigend 2000/339 (M), Peru
<i>T. salzmannii</i> DC.	Franca & Melo 16843 (M), Brasil
<i>T. volubilis</i> L.	cult. Botanical Garden Berlin-Dahlem, Germany (BSB, AFE-coll.), not indicated
TOURNEFORTIA – <i>Tournefortia</i> sect. <i>Tournefortia</i>	
<i>T. argentea</i> L.f.	Panahi 28.04.1933 s.n. (B), Hawaii
<i>T. bicolor</i> Sw.	Hilger Cuba_99/12 (BSB, AFE-coll.), Cuba
<i>T. glabra</i> L.	Howard & Howard 8604 (B), Dominican Republic
<i>T. gnaphalodes</i> (L.) Kunth	Hilger Cuba_99/34 (BSB, AFE-coll.), Cuba
<i>T. hirsutissima</i> L.	Köhler 12.04.1995 s.n. (BSB, AFE-coll.), Cuba
<i>T. luzonica</i> I.M.Johnst.	Liede 3302 (BSB), Philippines
<i>T. microcalyx</i> (Ruiz & Pav.) I.M.Johnst.	Weigend & Dostert 97/5 (M), Peru
<i>T. rollotii</i> Killip	Schnetter 23.02.1983 (BSB, AFE-coll.), Colombia
<i>T. ternifolia</i> Humb., Bonpl. & Kunth	Weigend et al. 5676 (BSB, AFE-coll.), Peru

Tab. 6-1. The species investigated in this survey, including the location of voucher specimens. DNA-numbers correspond to the BSB. (BSB) = Institut für Biologie -Systematische Botanik und Pflanzengeographie, Freie Universität Berlin, Germany; (CANB) = Australian National Herbarium, Canberra, Australia; (FR) = Herbarium Senckenbergianum, Frankfurt, Germany; (KAS) = Herbarium University Kassel, Germany ;(M) = Botanische Staatssammlung München, Germany; (MO) = Missouri Botanical Garden Herbarium, USA; (USCH) = A.C. Moore Herbarium, University of South Carolina, USA.

Species	Voucher	Source	BSB accession number	GenBank accession number trnL	GenBank accession number ITS1
OUTGROUP					
<i>Nama demissum</i> A. Gray	Hofmann 10/98 (BSB)	USA: California	281	##	##
<i>Ehretia acuminata</i> R.Br.	cult. Botanical Garden of Adelaide (BSB)	Australia	492	##	AF385798
INGROUP – Heliotropiaceae					
<i>Argusia sibirica</i> (L.) Dandy as <i>Tournefortia. sibirica</i> L.	Skvortsov, 02.06.1962 (M)	Russia	893	##	##
<i>Argusia sogdiana</i> (Bunge) Czerep. as <i>Heliotropium argusioides</i> Kar. & Kir.	Belianina & Sofeikiva 11543 (M)	Russia	773, 40	##	##
<i>Ceballosia fruticosa</i> (L.f.) Kunkel (as <i>Tournefortia messerschmidia</i> Sweet)	cult. Royal Botanic Gardens, Kew, Great Britain	Spain: Canary Islands	303	##	##
<i>Heliotropium adenogynum</i> I.M.Johnst.	Cano 10058 (M)	Peru	726	##	##
<i>Heliotropium aegyptiacum</i> Lehm.	Schultka 1995/5 (BSB)	Kenya	16	##	AF396918
<i>Heliotropium amplexicaule</i> Vahl	Hilger Arg_95/70 (BSB)	Argentina	59	##	--
	Jenny 6.1.1991 s.n. (BSB)	Argentina	605	--	AF396906
<i>Heliotropium angiospermum</i> Murray	Hilger Cuba_99/44 (BSB)	Cuba	454	--	AF396907
<i>Heliotropium antillanum</i> Urb.	Hilger Cuba_99/26 (BSB)	Cuba	442	##	AF396891
<i>Heliotropium arbainense</i> Fresen.	Förther 4049 (BSB)	Egypt	606	##	AF396916
<i>Heliotropium arborescens</i> L.	commercial cultivated plant (BSB)	not indicated	563	##	AF396896
<i>Heliotropium asperrimum</i> R.Br.	Craven 9671 (CANB)	Australia	842	##	##
<i>Heliotropium bacciferum</i> Forssk.	Podlech 35182 (M)	Algeria	115	##	##
<i>Heliotropium ballii</i> Domin	Craven 8573 (M)	Australia	741	--	##
<i>Heliotropium bursiferum</i> Wr. ex Griseb.	Hilger Cuba_99/25 (BSB)	Cuba	443	##	AF396888
<i>Heliotropium campestre</i> Griseb.	Jenny 37 (BSB)	Argentina	207	##	AF396887

Species	Voucher	Source	BSB accession number	GenBank accession number trnL	GenBank accession number ITS1
<i>Heliotropium chrysanthum</i> Phil.	Hilger Arg_95/81 (BSB)	Argentina	20	##	--
	Hilger Arg_95/92 (BSB)	Argentina	515	--	AF396894
<i>Heliotropium ciliatum</i> Kaplan	Hilger Nam_93/10 (BSB)	Namibia	10B	##	##
<i>Heliotropium convolvulaceum</i> (Nutt.) A.Gray	Hilger USA_92/77 (BSB)	USA: California	1042	--	##
	Miller 6691 (BSB)	USA: Colorado	1043	##	##
<i>Heliotropium crassifolium</i> Boiss. & Noe	Akhani & Lari 5591 (KAS)	Iran	600	##	##
<i>Heliotropium cupressinum</i> Craven	Fryxell & Craven 4006 (M)	Australia	134	--	##
<i>Heliotropium curassavicum</i> L. var. <i>argentinum</i> I.M.Johnst.	Hilger Arg_95/82 (BSB)	Argentina	232	##	AF396898
	subsp. <i>oculatum</i> (A. Heller) Thorne	Hilger USA_94/21 (BSB)	USA	3B	##
<i>Heliotropium digynum</i> (Forrsk.) Asch. ex C.Chr.	Hilger Israel_94/23 (BSB)	Israel	211	##	AF396915
<i>Heliotropium elongatum</i> (Lehm.) I.M.Johnst.	Hilger Arg_95/15 (BSB)	Argentina	966	--	##
<i>Heliotropium erosum</i> Lehm.	Zippel 2000/69 (BSB)	Spain: Tenerife	677	##	##
<i>Heliotropium europaeum</i> L.	Hilger Bg_97/6 (BSB)	Bulgaria	496, 581	##	##
<i>Heliotropium giessii</i> Friedr.- Holzh.	Hilger Nam_93/3 (BSB)	Namibia	607	##	AF396917
<i>Heliotropium hirsutissimum</i> Grauer	Nogatz 28.09.1997 s.n. (BSB)	Turkey	580	##	--
	Kagiampaki 24.07.2000 s.n. (BSB)	Greece: Crete	692	--	AF396912
<i>Heliotropium humifusum</i> Kunth	Löschner March 2000 s. n. (BSB)	Cuba	673	##	AF396890
<i>Heliotropium incanum</i> Ruiz & Pav.	Weigend 2000/162 (M)	Peru	733	##	AY176077
<i>Heliotropium indicum</i> L	Hilger Cuba_22/99 (BSB)	Cuba	448	--	##
<i>Heliotropium krauseanum</i> Fedde	Weigend & Förther 97/727 (M)	Peru	233	##	AF396909
<i>Heliotropium kurtzii</i> Gangui	Weigend et al. 5914 (BSB)	Argentina	1066	--	##
<i>Heliotropium linariaefolium</i> Phil.	Dillon, Dillon & Poblete 5502 (M)	Chile	713	--	##
<i>Heliotropium lineare</i> (A.DC.) Gürke	Hilger Nam_93/7 (BSB)	Namibia	8B	##	##

Species	Voucher	Source	BSB accession number	GenBank accession number trnL	GenBank accession number ITS1
<i>Heliotropium mandonii</i> I.M.Johnst.	Weigend, cult. Botanical Garden of München-Nymphenburg, Germany 1.9.1997 (BSB)	Ecuador	205	##	AF396895
<i>Heliotropium mendocinum</i> Phil.	Hilger Arg_95/77 (BSB)	Argentina	235	##	AF396893
<i>Heliotropium microstachyum</i> Ruiz & Pav.	Hilger Arg_95/54 (BSB)	Argentina	65	##	--
	Weigend et. al. 97/320 (BSB)	Peru	690	--	AF396908
<i>Heliotropium nelsonii</i> C.H.Wright	Hilger Nam_93/6 (BSB)	Namibia	518, 7B	##	##
<i>Heliotropium nicotianaefolium</i> Poir.	Hilger Arg_95/56 (BSB)	Argentina	13H	##	--
	Hilger Arg_28.01.1998 s.n. (BSB)	Argentina	720	--	##
<i>Heliotropium oliverianum</i> Schinz	Hilger Nam_93/16 (BSB)	Namibia	608, 15B	##	AF396913
<i>Heliotropium ovalifolium</i> Forssk.	Hilger Nam_93/5 (BSB)	Namibia	12B	##	AF396886
<i>Heliotropium paronychioides</i> A.DC.	Hilger Arg_95/96 (BSB)	Argentina	23H	##	--
	Grau 2750 (M)	Chile	709	--	##
<i>Heliotropium patagonicum</i> (Speg.) I.M.Johnst.	Weigend et al. 5940 (BSB)	Argentina	1062	##	##
<i>Heliotropium pinnatisectum</i> R.L.Pérez-Mor.	Weigend et al. 5901 (BSB)	Argentina	1060	##	##
<i>Heliotropium procumbens</i> Mill.	Feuerer 9452b (BSB)	Bolivia	210	##	AF396885
<i>Heliotropium pulvinum</i> Craven	Craven 8583 (M)	Australia	132	--	##
<i>Heliotropium pycnophyllum</i> Phil.	Dillon & Dillon 6041 (M)	Chile	714	##	##
<i>Heliotropium rariflorum</i> Stocks subsp. <i>hereroense</i> (Schinz) Verdc.	Hilger Nam_93/23 (BSB)	Namibia	16B	##	AF396889
<i>Heliotropium stenophyllum</i> Hook. & Arn.	Dillon 5428 (M)	Chile	715	--	##
<i>Heliotropium strigosum</i> Willd.	Müller 564-b (FR)	West Africa	1171	--	##
<i>Heliotropium styotrichium</i> Craven	Craven 9687 (CANB)	Australia	843	##	##
<i>Heliotropium suaveolens</i> M.Bieb.	Hilger Bg_97/5 (BSB)	Bulgaria	204	##	AF396911
<i>Heliotropium supinum</i> L.	Hilger anno 1985 s.n. (BSB)	Italy	350	##	AF396919
<i>Heliotropium taltalense</i> (Phil.) I.M.Johnst.	Dillon & Teillier 5233 (M)	Chile	716	--	##
<i>Heliotropium tenuifolium</i> R.Br.	Craven 9688 (CANB)	Australia	844	##	AY176079
<i>Heliotropium transalpinum</i> Vell.	Hilger Arg_95/23 (BSB)	Argentina	611	--	AF396904

Species	Voucher	Source	BSB accession number	GenBank accession number	
				trnL	ITS1
<i>Heliotropium tubulosum</i> DC.	Hilger Nam_93/18 (BSB)	Namibia	208, 13B	##	##
<i>Heliotropium veronicifolium</i> Griseb	Hilger Arg_95/20 (BSB), cult. Botanical Garden of München-Nymphenburg, Germany,	Argentina	206	##	##
<i>Heliotropium zeylanicum</i> (Burm.f.) Lam.	Hilger Kenya_94/4 (BSB)	Kenya	612	##	##
<i>Hilgeria hypogaea</i> (Urban & Eckman) Förther	Ekman 1927 s.n. (Isotypus) (M)	Cuba	895	##	--
	Briggs 226 (M)	Cuba	894	--	##
<i>Hilgeria serpylloides</i> (Griseb.) Förther	Webster 3966 (M)	Cuba	896	--	##
<i>Ixorhea tschudiana</i> Fenzl	cult. Botanical Garden of München-Nymphenburg, Germany (BSB, AFE-coll.)	Argentina	176	##	AF396880
<i>Nogalia drepanophyllum</i> (Baker) Verdc.	Kilian 6603 (BSB)	Yemen	799	##	##
<i>Schleidenia baclei</i> DC. var. <i>rostratum</i> I.M.Johnst.	Gilges 685 (M)	Zambia	707	##	##
<i>Schleidenia lagoensis</i> Warm.	Schessl 2831 (M)	Brazil	708	##	AF396892
<i>Tournefortia argentea</i> L.f.	Tillich 3555, cult. Botanical Garden of München-Nymphenburg, Germany	Mauritius	319, 687	##	AF396900
<i>Tournefortia breviloba</i> Krause	Weigend & Horn 3827 (BSB)	Ecuador	823	##	##
<i>Tournefortia chinchensis</i> Killip	Weigend et al. 2001/160 (BSB)	Peru	949	##	##
<i>Tournefortia fuliginosa</i> Humb., Bonpl. & Kunth	Weigend & Horn 3834 (BSB)	Ecuador	825	##	##
<i>Tournefortia gnaphalodes</i> (L.) Kunth	Hilger Cuba_99/34 (BSB)	Cuba	441	##	AF396903
<i>Tournefortia hirsutissima</i> L.	Stenzel 96/32 (BSB)	Cuba	74	##	AF396901
<i>Tournefortia luzonica</i> I.M.Johnst.	Liede 3302 (BSB)	Philippines	601, 430	##	AF396899
<i>Tournefortia microcalyx</i> (Ruiz & Pav.) I.M.Johnst.	Weigend & Dostert 97/5 (M)	Peru	686	--	AF396905
<i>Tournefortia polystachya</i> Ruiz & Pav.	Weigend & Horn 3869 (BSB)	Ecuador	822	##	##
<i>Tournefortia psilostachya</i> Kunth	Weigend & Weigend 2000/339 (M)	Peru	718	--	AF396883
<i>Tournefortia rollotii</i> Killip	Schnetterer 23.02.1983 s.n. (BSB)	Colombia	150	--	##
<i>Tournefortia salzmännii</i> DC.	Franca & Melo 16843 (M)	Brazil	719	--	AF396884

Species	Voucher	Source	BSB accession number	GenBank accession number trnL	GenBank accession number ITS1
<i>Tournefortia tarmensis</i> (Krause) Macbride	Weigend et al. 2001/19 (BSB)	Peru	946	##	##
<i>Tournefortia ternifolia</i> Humb., Bonpl. & Kunth	Weigend et al. 2001/25 (BSB)	Peru	947	##	##
<i>Tournefortia undulata</i> Benth.	Weigend & Förther 1997/880 (BSB)	Peru	824	##	##
<i>Tournefortia usambarensis</i> (Verdc.) B.Verdc.	Lovett & Thomas 2464 (MO)	Tanzania	794	--	AY176083
<i>Tournefortia</i> cf. <i>virgata</i> Ruiz & Pav.	Weigend et al. 2001/48 (BSB)	Peru	950	--	##
<i>Tournefortia volubilis</i> L.	Hilger Mex_1980/6 (BSB)	Mexico	147	##	AF396882
	cult. Botanical Garden of München-Nymphenburg, Germany	not indicated	689	##	AF396881