

Cimerman Ž., Anžlovar S. & Strgulc Krajšek S. (2025) Genus *Aneura* (*Marchantiophyta*) in Slovenia and new potential lineages for Europe. – *Preslia* 97: 589–612.

Supplementary Table S3. Collection details and BOLD/GenBank accession codes of the compiled sequences list used in the phylogenetic analyses.

Taxon	Voucher information	Geographical locality	BOLD ID	GenBank ITS	GenBank <i>matK</i>	GenBank <i>trnH-psbA</i>	GenBank <i>trnL-trnF</i>	Reference
<i>Aneura</i> A	LG Vanderpoorten 2438	UK, England, coll. Vanderpoorten		DQ986144				Wickett & Goffinet (2008)
<i>Aneura</i> A ₁	POZW 42486	S Poland, Beskidy Mts, Szczawa stream		KY705413	KY705532	KY705649	KY705912	Bączkiewicz et al. (2017)
<i>Aneura</i> A ₁	POZW 42907	S Poland, Tatry Mts, Olczyska Valley		KY705418	KY705537	KY705652	KY705918	Bączkiewicz et al. (2017)
<i>Aneura</i> A ₂	POZW 42478	S Poland, Beskidy Mts, valley of Kozłeczki stream		KY705420	KY705539	KY705654	KY705920	Bączkiewicz et al. (2017)
<i>Aneura</i> A ₃	POZW 40383	S Poland, Pieniny Mts, tributary of Potok Skalskie stream		KY705424	KY705543	KY705658	KY705925	Bączkiewicz et al. (2017)
<i>Aneura</i> A	Schafer-Verwimp ASV 25668	Portugal, Madeira					FM210487	Preußing et al. (2010)
<i>Aneura</i> A (sp. 2)	E00758081	Switzerland, Vaud, coll. D.G. Long, G. Ruthero, S. Rubasinghe	LWT179-20					Söderström et al. (2023)
<i>Aneura</i> A (sp. 2)	TRH-770796	Sweden, Kalmar, Oland, coll. K. Hassel	LWT362-20					Söderström et al. (2023)
<i>Aneura</i> B ₁	POZW 42019	Central Poland, Wielkopolska, SW part of Poznań		KY705438	KY705557	KY705667	KY705945	Bączkiewicz et al. (2017)
<i>Aneura</i> B ₁	POZW 40261	NE Poland, Warmia, Lake Redykajny		KY705436	KY705555	KY705665	KY705943	Bączkiewicz et al. (2017)
<i>Aneura</i> B ₁	NY Lan., Bak., Maks. 1, Bryophyta Karelica Exsiccata, CD62	Russia, coll. Lantratova, Bakalín, and Maksimov				AY607921		Forrest & Crandall-Stotler (2006)
<i>Aneura</i> B ₂	POZW 42793	SE Poland, Bieszczady Mts, valley of Beskidnik stream		KY705441	KY705560	KY705669	KY705948	Bączkiewicz et al. (2017)
<i>Aneura</i> B ₃	POZW 42911	NW Poland, Western Pomerania, Słupia river		KY705449	KY705568	KY705677	KY705959	Bączkiewicz et al. (2017)

<i>Aneura</i> B	STU MN 051089	Germany, Black Forest					FM210489	Preußing et al. (2010)
<i>Aneura</i> C ₁	POZW 40539	S Poland, Tatry Mts, Sucha Woda Valley		KY705459	KY705578	KY705684	KY705969	Bączkiewicz et al. (2017)
<i>Aneura</i> C ₁	POZW 42747	Central Poland, Wielkopolska, valley of Rurzyca river		KY705456	KY705575	KY705681	KY705966	Bączkiewicz et al. (2017)
<i>Aneura</i> C ₂	POZW 42879	SE Poland, Bieszczady Mts, Ustrzyki Górne, small stream		KY705466	KY705585	KY705687	KY705976	Bączkiewicz et al. (2017)
<i>Aneura</i> D	POZW 40163	United Kingdom, Scotland, North Ebudes, coll. D.G. Long		KY705468	KY705587	KY705689	KY705978	Bączkiewicz et al. (2017)
<i>Aneura</i> D	POZW 40238	United Kingdom, Ireland, West Galway, coll. D.G. Long		KY705469	KY705588	KY705690	KY705979	Bączkiewicz et al. (2017)
<i>Aneura</i> E ₁	POZW 40521	S Poland, Tatry Mts, Wielka Sucha Dolina valley		KY705471	KY705590	KY705692	KY705981	Bączkiewicz et al. (2017)
<i>Aneura</i> E ₁	POZW 42887	S Poland, Śląsk, near Katowice		KY705484	KY705603	KY705700	KY705997	Bączkiewicz et al. (2017)
<i>Aneura</i> E ₂	POZW 42888	S Poland, Pieniny Mts, Limbargowy Potok stream			KY705604	KY705701	KY706001	Bączkiewicz et al. (2017)
<i>Aneura</i> E	STU MN 051085	Germany, Harbach					FM210485	Preußing et al. (2010)
<i>Aneura</i> G	POZW 42767	NW Poland, Western Pomerania, Lake Małe Płocice		KY705502	KY705620	KY705712	KY706023	Bączkiewicz et al. (2017)
<i>Aneura</i> G	POZW 42896	SE Poland, Bieszczady Mts, Beskid Pass		KY705503	KY705621	KY705713	KY706024	Bączkiewicz et al. (2017)
<i>Aneura</i> G	POZW 42897	S Poland, Beskidy Mts, Dejakowy Potok stream		KY705504	KY705622	KY705714	KY706025	Bączkiewicz et al. (2017)
<i>Aneura</i> H	POZW 42755	S Poland, Śląsk, near Katowice		KY705506	KY705624	KY705716	KY706029	Bączkiewicz et al. (2017)
<i>Aneura</i> H	POZW 42898	Central Poland, Wielkopolska, valley of Rurzyca river		KY705505	KY705623	KY705715	KY706028	Bączkiewicz et al. (2017)
<i>Aneura</i> I	POZW 42760	NW Poland, Western Pomerania, Lake Małe Oczko		KY705509	KY705627	KY705719	KY706032	Bączkiewicz et al. (2017)

<i>Aneura</i> I	POZW 42768	NW Poland, Western Pomerania, Lake Małe Oczko		KY705508	KY705626	KY705718	KY706031	Bączkiewicz et al. (2017)
<i>Aneura</i> M	NYBG Wagner 4239	USA, Alaska, coll. D. Wagner					FM210483	Preußing et al. (2010)
<i>Aneura</i> M	NYBG Wagner 4239	USA, Alaska, coll. D. Wagner		DQ986140				Wickett & Goffinet (2008)
<i>Aneura</i> M	POZW 40372	Central Poland, Wielkopolska, valley of Rurzyca river		KY705521	KY705639	KY705731	KY706044	Bączkiewicz et al. (2017)
<i>Aneura</i> M	POZW 40543	S Poland, Tatry Mts, Dolina Białki valley		KY705525	KY705643	KY705734	KY706048	Bączkiewicz et al. (2017)
<i>Aneura</i> M	STU Faubert & Grenier 221	Canada, Quebec					FM210484	Preußing et al. (2010)
<i>Aneura</i> M (sp. 1)	E00758270	Czech Republic, Southern Bohemia, distr. Prachatice, coll. J. Kucera	LWT270-20					Söderström et al. (2023)
<i>Aneura</i> M (sp. 1)	PO-945	Portugal, Tras os Montes, Montalegre, coll. C. Vieira	LWT401-20					Söderström et al. (2023)
<i>Aneura maxima</i>	E00758188	Malaysia, Pahang, coll. D.G. Long	LWT109-20					Söderström et al. (2023)
<i>Aneura maxima</i>	E00758384	French Polynesia, Society Islands, Tahiti, coll. T. Hedderson	LWT265-20					Söderström et al. (2023)
<i>Aneura maxima</i>	E00774679	China, Yunnan, Gongshan County, coll. D.G. Long	LWT097-20					Söderström et al. (2023)
<i>Aneura maxima</i>	E00774685	China, Yunnan, Gongshan County, coll. D.G. Long	LWT123-20					Söderström et al. (2023)
<i>Aneura maxima</i>	STU Preussing	Ecuador, Zamora					FM210490	Preußing et al. (2010)
<i>Aneura maxima</i> (J)	POZW 40511	Japan, Mount Lide, N slope		KY705514	KY705632	KY705724	KY706037	Bączkiewicz et al. (2017)
<i>Aneura maxima</i> (J)	POZW 40544	Japan, Mount Lide, N slope		KY705513	KY705631	KY705723	KY706036	Bączkiewicz et al. (2017)
<i>Aneura maxima</i> (Thai 4)	NA 29	Thailand, Chiangmai		OQ708364		OQ834061	OQ834088	Anantaprayoon et al. (2023)
<i>Aneura maxima</i> (Thai 4)	NA 30	Thailand, Chiangmai		OQ708363		OQ834062	OQ834089	Anantaprayoon et al. (2023)
<i>Aneura maxima</i> (Thai 4)	SCOS 1373	Thailand, Nakhon Si Thammarat				OQ834074	OQ834099	Anantaprayoon et al. (2023)

<i>Aneura maxima</i> (Thai 4)	SCOS 1570	Thailand, Nakhon Si Thammarat				OQ834075	OQ834100	Anantaprayoon et al. (2023)
<i>Aneura mirabilis</i>	CONN Boudier CD81	Belgium				AY607936		Davis (2004)
<i>Aneura mirabilis</i>	CONN C. Sergio	Portugal, whole chl DNA			EU043314	EU043314	EU043314	Wickett et al. (2008)
<i>Aneura mirabilis</i>	CONN Wickett 276	UK, Scotland					FM210481	Preußing et al. (2010)
<i>Aneura pellioides</i>	HIRO 1155261	Mt. Ege, Hiroshima City, Japan	LWT489-21					Söderström et al. (2023)
<i>Aneura pellioides</i>	HIRO 1155265	Mt. Ege, Hiroshima City, Japan	LWT488-21					Söderström et al. (2023)
<i>Aneura pinguis</i>	CONN Wickett 338	USA, coll. Wickett		DQ986142				Wickett & Goffinet (2008)
<i>Aneura pinguis</i>	E00774677	Albania, Kukes County, coll. D.G. Long	LWT272-20					Long et al. (2023)
<i>Aneura pinguis</i>	E01021874	United Kingdom, England, Cambridgeshire, coll. G. Preston	LWT535-21					Long et al. (2023)
<i>Aneura pinguis</i> (F)	NYBG 576889	USA, Presque Isle Country, Lake Huron, N of Evergreen Highway, coll. W.R. Buck		KY705499				Bączkiewicz et al. (2017)
<i>Aneura pinguis</i> (F)	POZW 42818	S Poland, Beskidy Mts, valley of Kozłeczki stream		KY705495	KY705614	KY705708	KY706013	Bączkiewicz et al. (2017)
<i>Aneura pinguis</i> (F)	POZW 42910	S Poland, Pieniny Mts, Kotłowy Potok stream		KY705497	KY705616	KY705710	KY706015	Bączkiewicz et al. (2017)
<i>Aneura sharpii</i>	ABSH Hatcher culture #12	USA, Wisconsin				AY507474	AY507520	Forrest (2004)
<i>Aneura sharpii</i>	EDNA 06-06012	United States, Wisconsin, Hatcher culture	LWT058-20					Söderström et al. (2023)
<i>Aneura sharpii</i>	NYSi 15351	United States, New York, Dutchess County, coll. N.G. Miller, E. Kiviat	LWT173-20					Söderström et al. (2023)
<i>Aneura sharpii</i>	NYSi 17299	United States, New York, Essex County, coll. N.G. Miller	LWT172-20					Söderström et al. (2023)
<i>Aneura sharpii</i>	NYSi 25164	United States, Massachusetts, Dukes County, coll. N.G. Miller	LWT176-20					Söderström et al. (2023)
<i>Aneura</i> Thai 1	JSKB 01	Thailand, Krabi				OQ834053	OQ834082	Anantaprayoon et al. (2023)

<i>Aneura</i> Thai 1	JSPSU 01	Thailand, Songkhla		OQ708372		OQ834054	OQ834083	Anantaprayoon et al. (2023)
<i>Aneura</i> Thai 1	NAPSU 01	Thailand, Songkhla				OQ834069	OQ834094	Anantaprayoon et al. (2023)
<i>Aneura</i> Thai 1	NS 02	Thailand, Loei		OQ708356		OQ834070	OQ834095	Anantaprayoon et al. (2023)
<i>Aneura</i> Thai 2	NA 27	Thailand, Chiangmai		OQ708366		OQ834059		Anantaprayoon et al. (2023)
<i>Aneura</i> Thai 2	NA 28	Thailand, Chiangmai		OQ708365		OQ834060		Anantaprayoon et al. (2023)
<i>Aneura</i> Thai 2	NA 31	Thailand, Chiangmai		OQ708362		OQ834063		Anantaprayoon et al. (2023)
<i>Aneura</i> Thai 3	BPL 2	Thailand, Loei		OQ708374		OQ834052	OQ834081	Anantaprayoon et al. (2023)
<i>Aneura</i> Thai 3	NA 20	Thailand, Nakhon Nayok		OQ708370		OQ834056	OQ834085	Anantaprayoon et al. (2023)
<i>Aneura</i> Thai 3	NA 26	Thailand, Chiangmai		OQ708367		OQ834058	OQ834087	Anantaprayoon et al. (2023)
<i>Aneura</i> Thai 3	NA 46	Thailand, Nakhon Nayok		OQ708360		OQ834064	OQ834090	Anantaprayoon et al. (2023)
<i>Lobatiriccardia lobata</i>	ABSH 4581 Glenney & Kinser; Crandall-Stotler	New Zealand, South Island, Arthur's Pass		DQ986148		AY507507	AY507553	Forrest & Crandall-Stotler (2006), Wickett & Goffinet (2008)
<i>Lobatiriccardia</i> sp.	EDNA 06-06123	Venezuela	LWT060-20					Söderström et al. (2023)
<i>Lobatiriccardia</i> sp.	EDNA08-00113	Chile	LWT138-20					Söderström et al. (2023)

References

- Anantaprayoon N., Wonnapijit P. & Kraichak E. (2023) Integrative approaches to a revision of the liverwort in genus *Aneura* (*Aneuraceae*, *Marchantiophyta*) from Thailand. – PeerJ 11: e16284.
- Bączkiewicz A., Szczecińska M., Sawicki J., Stebel A. & Buczkowska K. (2017) DNA barcoding, ecology and geography of the cryptic species of *Aneura pinguis* and their relationships with *Aneura maxima* and *Aneura mirabilis* (*Metzgeriales*, *Marchantiophyta*). – PLoS ONE 12: e0188837.
- Davis E. C. (2004) A molecular phylogeny of leafy liverworts (*Jungermanniidae*: *Marchantiophyta*). – Monographs in Systematic Botany from the Missouri Botanical Garden 98: 61–86.
- Forrest L. L. & Crandall-Stotler B. J. (2004) A phylogeny of the simple thalloid liverworts (*Jungermanniopsida*, subclass *Metzgeriidae*) as inferred from five chloroplast genes. – In: Goffinet B., Hollowell V., Magill R. (eds), Molecular Systematics of Bryophytes. Monographs in Systematic Botany, Missouri Botanical Garden 98: 119–140.

- Forrest L. L., Davis E. C., Long D. G., Crandall-Stotler B. J., Clark A. & Hollingsworth M. L. (2006) Unravelling the evolutionary history of the liverworts (*Marchantiophyta*): multiple taxa, genomes and analyses. – *Bryologist* 109: 303–334.
- Long D., Forrest L., Hassel K., Séneca A. & Söderström L. (2023) Typification of *Jungermannia pinguis* L. Studies on the genus *Aneura* (*Marchantiophyta*, *Aneuraceae*). – *Edinburgh Journal of Botany* 80: 1–11.
- Preußing M., Olsson S., Schäfer-Verwimp A., Wickett N. J., Wicke S., Quandt D. & Nebel M. (2010) New insights in the evolution of the liverwort family *Aneuraceae* (*Metzgeriales*, *Marchantiophyta*), with emphasis on the genus *Lobatiriccardia*. – *Taxon* 59: 1424–1440.
- Reeb C., Kaandorp J., Jansson F., Puillandre N., Dubuisson J. Y., Cornette R., Jabbour F., Coudert Y., Patino J., Flot J. F. & Vanderpoorten A. (2018) Quantification of complex modular architecture in plants. – *New Phytologist* 218: 859–872.
- Söderström L., Forrest L. L., Hassel K., Long D. G., Séneca A. & Inoue Y. (2023) Studies on *Aneura* (*Aneuraceae*): The *Aneura maxima* complex. – *Hattoria* 14: 67–73.
- Wickett N. & Goffinet B. (2008) Origin and relationships of the myco-heterotrophic liverwort *Cryptothallus mirabilis* Malm. (*Metzgeriales*, *Marchantiophyta*). – *Botanical Journal of the Linnean Society* 156: 1–12.
- Wickett N. J., Zhang Y., Kellon Hansen S., Roper J. M., Kuehl J. V., Plock S. A., Wolf P. G., Pamphilis C. W., Boore J. L. & Goffinet B. (2008) Functional gene losses occur with minimal size reduction in the plastid genome of the parasitic liverwort *Aneura mirabilis*. – *Molecular Biology and Evolution* 25: 393–401.