



Supplement

The following supplementary materials are available for this article: Huang, W.-J., Hsu, T.-C., Chung, S.-W. 2024 *Artemisia tyuosenicola* (Asteraceae), a new species from Taiwan. *Taiwania* 69(3): 372-379. doi: 10.6165/tai.2024.69.372

Table S1. Taxa sampled, voucher information, and GenBank accession numbers for sequences analyzed in this study. Missing data is represented by "--".

Taxon	nrITS	nrETS	trnL-trnF	psbA-trnH	Voucher (Col. #, Herbarium)	Collection Locality
Newly generated						
<i>Artemisia anomala</i>	PP756301	PP757384	PP757411	PP757438	Chung14268, TAIF	Siyuan, Taiwan
<i>Artemisia capillaris</i>	PP756302	PP757385	PP757412	PP757439	Chung14199, TAIF	Fulong, Taiwan
<i>Artemisia filifolia</i>	PP756303	PP757386	PP757413	PP757440	Chung14537, TAIF	Hualien, Taiwan
<i>Artemisia indica</i> 1	PP756304	PP757387	PP757414	PP757441	Chung14567, TAIF	Nantou, Taiwan
<i>Artemisia indica</i> 2	PP756305	PP757388	PP757415	PP757442	Chung14216, TAIF	Pinglin, Taiwan
<i>Artemisia indica</i> 3	PP756306	PP757389	PP757416	PP757443	Chung14255, TAIF	Nangan, Taiwan
<i>Artemisia indica</i> 4	PP756307	PP757390	PP757417	PP757444	WJH1684, TAIF	Nantou, Taiwan
<i>Artemisia indica</i> 5	PP756308	PP757391	PP757418	PP757445	Chung14003, TAIF	Hsinchu, Taiwan
<i>Artemisia japonica</i> 1	PP756309	PP757392	PP757419	PP757446	Chung14002, TAIF	Hsinchu, Taiwan
<i>Artemisia japonica</i> 2	PP756310	PP757393	PP757420	PP757447	Chung14366, TAIF	Miaoli, Taiwan
<i>Artemisia kawakamii</i> 1	PP756311	PP757394	PP757421	PP757448	WJH1818, TAIF	XueShan, Taiwan
<i>Artemisia kawakamii</i> 2	PP756312	PP757395	PP757422	PP757449	Chung15162, TAIF	Hehuanshan, Taiwan
<i>Artemisia kawakamii</i> 3	PP756313	PP757396	PP757423	PP757450	Chung13944, TAIF	Zhongyangjian, Taiwan
<i>Artemisia lancea</i>	PP756314	PP757397	PP757424	PP757451	Chung15119, TAIF	Miaoli, Taiwan
<i>Artemisia morrisonensis</i> 1	PP756315	PP757398	PP757425	PP757452	Chung15121, TAIF	Hehuanshan, Taiwan
<i>Artemisia morrisonensis</i> 2	PP756316	PP757399	PP757426	PP757453	WJH1817, TAIF	XueShan, Taiwan
<i>Artemisia morrisonensis</i> 3	PP756317	PP757400	PP757427	PP757454	Chung13945, TAIF	Zhongyangjian, Taiwan
<i>Artemisia niitakayamensis</i> 1	PP756318	PP757401	PP757428	PP757455	WJH1760, TAIF	Yushan, Taiwan
<i>Artemisia niitakayamensis</i> 2	PP756319	PP757402	PP757429	PP757456	WJH1793, TAIF	Yushan, Taiwan
<i>Artemisia niitakayamensis</i> 3	PP756320	PP757403	PP757430	PP757457	CYH102, TCF	Yushan, Taiwan
<i>Artemisia somae</i> 1	PP756321	PP757404	PP757431	PP757458	Chung15103, TAIF	Kaohsiung, Taiwan
<i>Artemisia somae</i> 2	PP756322	PP757405	PP757432	PP757459	Chung14685, TAIF	Hualien, Taiwan
<i>Artemisia tsugitakaensis</i> 1	PP756323	PP757406	PP757433	PP757460	WJH1821, TAIF	XueShan, Taiwan
<i>Artemisia tsugitakaensis</i> 2	PP756324	PP757407	PP757434	PP757461	WJH1820, TAIF	XueShan, Taiwan
<i>Artemisia tsugitakaensis</i> 3	PP756325	PP757408	PP757435	PP757462	CYH287, TCF	XueShan, Taiwan
<i>Artemisia tyuosenicola</i> 1	PP756326	PP757409	PP757436	PP757463	Chung13943, TAIF	Zhongyangjian, Taiwan
<i>Artemisia tyuosenicola</i> 2	PP756327	PP757410	PP757437	PP757464	Chung13942, TAIF	Zhongyangjian, Taiwan
Accessed from Genbank						
<i>Artemisia abrotanum</i>	JX051694	JX069394	JX073778	JX073862	--	--
<i>Artemisia absinthium</i>	JX051763	JX069443	JX073827	JX073911	--	--
<i>Artemisia afra</i>	JX051743	JX069431	JX073815	JX073899	--	--
<i>Artemisia alba</i>	JX051695	JX069395	JX073779	JX073863	--	--
<i>Artemisia albicans</i>	JX051705	JX069459	--	--	--	--
<i>Artemisia albicerata</i>	JX051744	JX069467	--	--	--	--
<i>Artemisia annua</i>	AM398847	DQ028879	FJ692341	FJ418749	--	--
<i>Artemisia anomala</i>	JX051674	JX069377	JX073761	JX073845	--	--
<i>Artemisia arborescens</i>	JX051741	JX069429	JX073813	JX073897	--	--
<i>Artemisia arbuscula</i>	JX051666	JX069369	JX073753	JX073837	--	--
<i>Artemisia argentea</i>	JX051696	JX069396	JX073780	JX073864	--	--
<i>Artemisia argyi</i>	JX051681	JX069383	JX073767	JX073851	--	--
<i>Artemisia armeniaca</i>	JX051693	JX069393	JX073777	JX073861	--	--
<i>Artemisia atlantica</i>	JX051745	JX069468	--	--	--	--
<i>Artemisia atrata</i>	JX051761	JX069442	JX073826	JX073910	--	--
<i>Artemisia australis</i>	JX051753	JX069435	JX073819	JX073903	--	--
<i>Artemisia baldshuanica</i>	JX051658	JX069449	--	--	--	--
<i>Artemisia batakensis</i>	JX051684	JX069453	--	--	--	--
<i>Artemisia baxoiensis</i>	MH155211	MH155214	MH155220	MH155217	--	--
<i>Artemisia bigelovii</i>	JX051710	JX069405	JX073789	JX073873	--	--
<i>Artemisia caerulescens</i>	JX051697	JX069397	JX073781	JX073865	--	--
<i>Artemisia californica</i>	JX051687	JX069388	JX073772	JX073856	--	--
<i>Artemisia campestris</i>	JX051736	JX069426	JX073810	JX073894	--	--
<i>Artemisia cana</i>	JX051668	JX069371	JX073755	JX073839	--	--
<i>Artemisia capillaris</i>	JX051715	JX069410	JX073794	JX073878	--	--
<i>Artemisia carruthii</i>	JX051722	JX069416	JX073800	JX073884	--	--
<i>Artemisia chamaemelifolia</i>	JX051730	JX069420	JX073804	JX073888	--	--
<i>Artemisia chinensis</i>	JX051756	JX069438	JX073822	JX073906	--	--
<i>Artemisia constricta</i>	JX051752	JX069470	--	--	--	--
<i>Artemisia copa</i>	JX051759	JX069440	JX073824	JX073908	--	--
<i>Artemisia diffusa</i>	JX051653	JX069362	JX073746	JX073830	--	--
<i>Artemisia douglasiana</i>	JX051723	JX069417	JX073801	JX073885	--	--
<i>Artemisia dracunculul</i>	JX051718	JX069413	JX073797	JX073881	--	--
<i>Artemisia elongata</i>	JX051746	JX069432	JX073816	JX073900	--	--
<i>Artemisia eremophila</i>	JX051657	JX069448	--	--	--	--
<i>Artemisia filifolia</i>	JX051670	JX069373	JX073757	JX073841	--	--
<i>Artemisia flahaultii</i>	JX051719	JX069460	--	--	--	--
<i>Artemisia franserioides</i>	JX051669	JX069372	JX073756	JX073840	--	--
<i>Artemisia glacialis</i>	JX051700	JX069400	JX073784	JX073868	--	--
<i>Artemisia globularia</i>	JX051757	JX069439	JX073823	JX073907	--	--
<i>Artemisia glomerata</i>	JX051738	JX069427	JX073811	JX073895	--	--
<i>Artemisia gmelinii</i>	JX051662	JX069365	JX073749	JX073833	--	--
<i>Artemisia gorgonum</i>	JX051721	JX069415	JX073799	JX073883	--	--
<i>Artemisia gracilescens</i>	JX051731	JX069421	JX073805	JX073889	--	--
<i>Artemisia inaequifolia</i>	JX051676	JX069472	--	--	--	--
<i>Artemisia incana</i>	JX051762	JX069455	--	--	--	--
<i>Artemisia indica</i>	JX051701	JX069379	JX073763	JX073847	--	--



<i>Artemisia integrifolia</i>	AM398880	AM397987	--	--	--	--
<i>Artemisia intricata</i>	JX051659	JX069450	--	--	--	--
<i>Artemisia japonica</i>	JX051713	JX069408	JX073792	JX073876	--	--
<i>Artemisia karatavica</i>	JX051660	JX069451	--	--	--	--
<i>Artemisia kauaiensis</i>	JX051754	JX069436	JX073820	JX073904	--	--
<i>Artemisia kitadakensis</i>	JX051732	JX069465	--	--	--	--
<i>Artemisia klotzschiana</i>	JX051704	JX069458	--	--	--	--
<i>Artemisia kochiiiformis</i>	JX051747	JX069433	JX073817	JX073901	--	--
<i>Artemisia kurramensis</i>	JX051751	JX069469	--	--	--	--
<i>Artemisia laciniata</i>	JX051691	JX069391	JX073775	JX073859	--	--
<i>Artemisia laciniatifolmis</i>	JX051750	JX069434	JX073818	JX073902	--	--
<i>Artemisia lactiflora</i>	JX051675	JX069378	JX073762	JX073846	--	--
<i>Artemisia lagocephala</i>	JX051673	JX069376	JX073760	JX073844	--	--
<i>Artemisia lessingiana</i>	JX051655	JX069447	--	--	--	--
<i>Artemisia ludoviciana</i>	JX051708	JX069403	JX073787	JX073871	--	--
<i>Artemisia martirensis</i>	JX051734	JX069423	JX073807	JX073891	--	--
<i>Artemisia mauiensis</i>	JX051755	JX069437	JX073821	JX073905	--	--
<i>Artemisia melanolepis</i>	JX051703	JX069457	--	--	--	--
<i>Artemisia mendozana</i>	JX051689	JX069454	--	--	--	--
<i>Artemisia mesatlantica</i>	JX051749	JX069474	--	--	--	--
<i>Artemisia molinieri</i>	JX051690	JX069390	JX073774	JX073858	--	--
<i>Artemisia mongolica</i>	JX051683	JX069385	JX073769	JX073853	--	--
<i>Artemisia montana</i>	JX051677	JX069380	JX073764	JX073848	--	--
<i>Artemisia nesiotica</i>	JX051686	JX069387	JX073771	JX073855	--	--
<i>Artemisia nitida</i>	JX051698	JX069398	JX073782	JX073866	--	--
<i>Artemisia nitrosa</i>	JX051654	JX069363	JX073747	JX073831	--	--
<i>Artemisia nutans</i>	JX051661	JX069445	JX073829	JX073913	--	--
<i>Artemisia oelandica</i>	JX051692	JX069392	JX073776	JX073860	--	--
<i>Artemisia palmeri</i>	JX051740	JX069466	--	--	--	--
<i>Artemisia palustris</i>	JF326570	JF326627	--	--	--	--
<i>Artemisia pattersonii</i>	JX051737	JX069425	JX073809	JX073893	--	--
<i>Artemisia pedatifida</i>	JX051671	JX069374	JX073758	JX073842	--	--
<i>Artemisia pedemontana</i>	JX051702	JX069456	--	--	--	--
<i>Artemisia pontica</i>	JX051663	JX069366	JX073750	JX073834	--	--
<i>Artemisia potentilloides</i>	JX051760	JX069441	JX073825	JX073909	--	--
<i>Artemisia princeps</i>	JX051726	JX069462	--	--	--	--
<i>Artemisia pycnocephala</i>	JX051711	JX069406	JX073790	JX073874	--	--
<i>Artemisia pygmaea</i>	JX051724	JX069418	JX073802	JX073886	--	--
<i>Artemisia rigida</i>	JX051720	JX069414	JX073798	JX073882	--	--
<i>Artemisia rothrockii</i>	JX051665	JX069368	JX073752	JX073836	--	--
<i>Artemisia roxburghiana</i>	JX051682	JX069384	JX073768	JX073852	--	--
<i>Artemisia rutifolia</i>	JX051672	JX069375	JX073759	JX073843	--	--
<i>Artemisia sacrorum</i>	JX051733	JX069422	JX073806	JX073890	--	--
<i>Artemisia santonica</i>	JX051656	JX069364	JX073748	JX073832	--	--
<i>Artemisia saposchnikovii</i>	JX051716	JX069411	JX073795	JX073879	--	--
<i>Artemisia schmidtiana</i>	JX051699	JX069399	JX073783	JX073867	--	--
<i>Artemisia schrenkiana</i>	JX051728	JX069464	--	--	--	--
<i>Artemisia scoparia</i>	JX051717	JX069412	JX073796	JX073880	--	--
<i>Artemisia scopulorum</i>	JX051709	JX069404	JX073788	JX073872	--	--
<i>Artemisia serrata</i>	JX051706	JX069401	JX073785	JX073869	--	--
<i>Artemisia simplex</i>	JX051758	JX069471	--	--	--	--
<i>Artemisia sodiroi</i>	JX051667	JX069370	JX073754	JX073838	--	--
<i>Artemisia spiciformis</i>	JX051725	JX069461	--	--	--	--
<i>Artemisia spinescens</i>	JX051727	JX069463	--	--	--	--
<i>Artemisia stelleriana</i>	JX051679	JX069382	JX073766	JX073850	--	--
<i>Artemisia stolonifera</i>	JX051680	JX069452	--	--	--	--
<i>Artemisia subdigitata</i>	JX051739	JX069428	JX073812	JX073896	--	--
<i>Artemisia suksdorfii</i>	JX051707	JX069402	JX073786	JX073870	--	--
<i>Artemisia sylvatica</i>	JX051685	JX069386	JX073770	JX073854	--	--
<i>Artemisia tilesii</i>	JX051735	JX069424	JX073808	JX073892	--	--
<i>Artemisia tomentella</i>	JX051712	JX069407	JX073791	JX073875	--	--
<i>Artemisia tournefortiana</i>	JX051729	JX069419	JX073803	JX073887	--	--
<i>Artemisia tridentata</i>	JX051688	JX069389	JX073773	JX073857	--	--
<i>Artemisia tripartita</i>	JX051664	JX069367	JX073751	JX073835	--	--
<i>Artemisia vallesiaca</i>	JX051652	JX069446	--	--	--	--
<i>Artemisia vulgaris</i>	JX051678	JX069381	JX073765	JX073849	--	--
<i>Mausolea eriocarpa</i>	JX051742	JX069430	JX073814	JX073898	--	--
<i>Neopallasia pectinata</i>	JF326586	JF326643	--	--	--	--
<i>Kaschgaria komarovii</i>	JX051764	JX069444	JX073828	JX073912	--	--

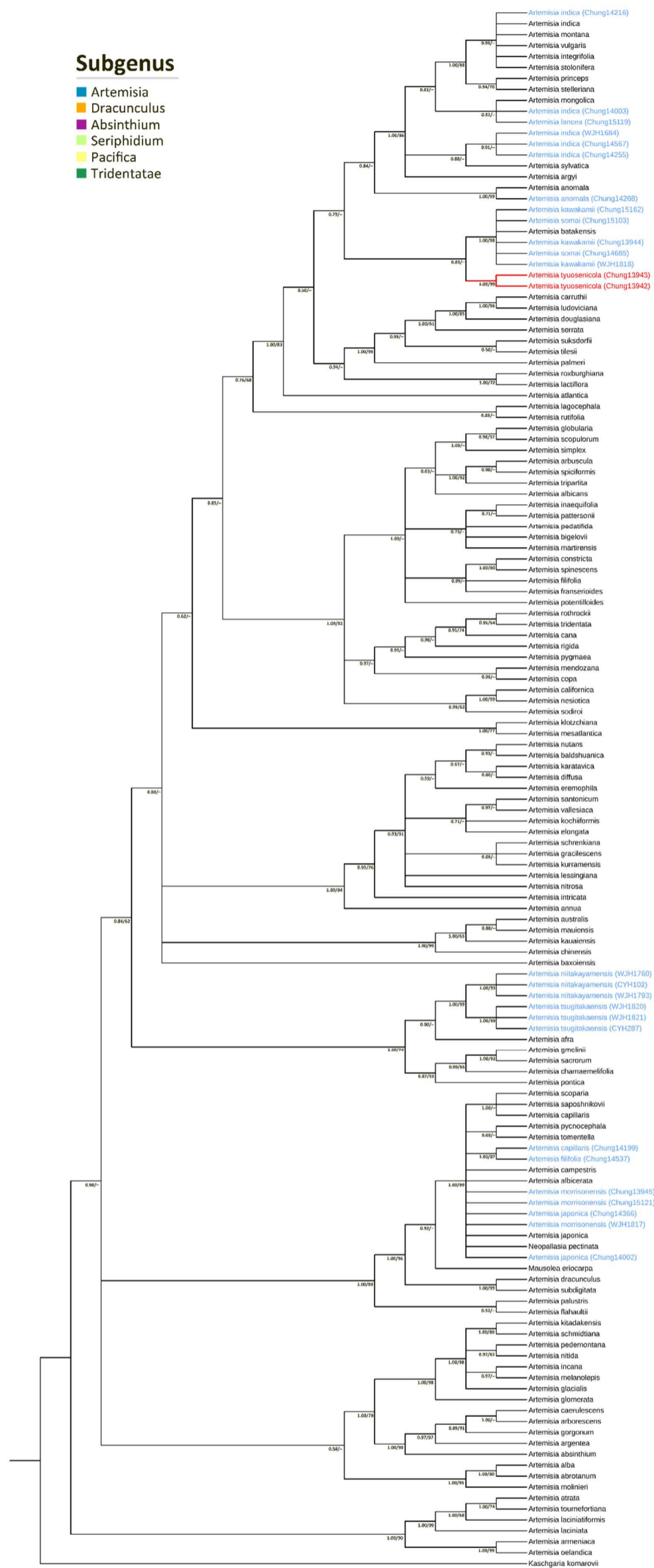


Fig. S1. The cladogram of *Artemisia* nrDNA dataset (ITS, ETS) using the Bayesian Inference method. The values adjacent to nodes represent Bayesian posterior probabilities (PP) / bootstrap percentages of Maximum Likelihood analysis (BS). Nodes with PP < 0.50 were collapsed, while BS < 50% is represented by a dash (-). *Artemisia tyuosenicola* samples are highlighted in red, and other newly generated sequences in this study are depicted in blue. Sample collection number follows the taxa names. Subgenus annotations are based on Jiao *et al.* (2019).

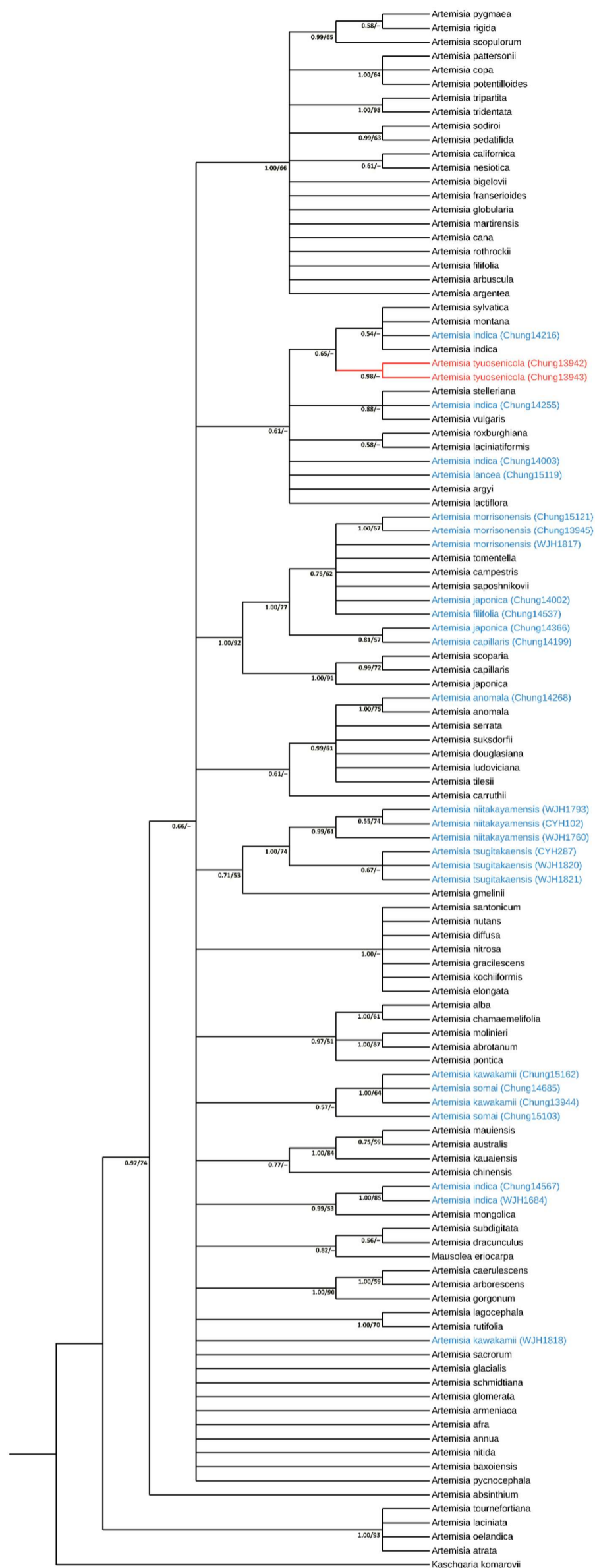


Fig S2. The cladogram of *Artemisia* cpDNA dataset (trnL-trnF, psbA-trnH) using the Bayesian Inference method. The values adjacent to nodes represent Bayesian posterior probabilities (PP) / bootstrap percentages of Maximum Likelihood analysis (BS). Nodes with PP < 0.50 were collapsed, while BS < 50% is represented by a dash (-). *Artemisia tyuosenicola* samples are highlighted in red, and other newly generated sequences in this study are depicted in blue.