

Evaluation of Phytochemistry, Toxicity and Radical Scavenging Capacity of Two *Erigeron* Species (*E. annuus* (L.) Pers. and *E. strigosus* Muhl. ex Willd.) Extracts

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Table S1. Total phenolic content (TPC, mg/L, expressed in gallic acid equivalent (GAE), $n=5$, five replicates were conducted in total for the measurement) in aqueous extracts of *E. annuus* (L.) Pers. and *E. strigosus* Muhl. ex Willd. flowers, leaves and roots (plant material collected in 2024).

TPC (mg/L, GAE) in aqueous extracts			
	Flower	Leaf	Root
<i>E. annuus</i>	81.88 ± 2.96 ^{a*}	196.92 ± 16.69 ^{b'}	11.88 ± 1.27 ^c
<i>E. strigosus</i>	102.05 ± 9.16 ^{d**}	228.79 ± 18.88 ^{e''}	15.34 ± 2.08 ^f

Different superscript letters (a, b, c and d, e, f) indicate significant differences between TPC values of various plant organs within each species, whereas asterisks (*) and apostrophes (') demonstrate significant differences between *E. annuus* and *E. strigosus* within the same plant organ ($p \leq 0.05$, using the Wechs's t-test).

Table S2. Total phenolic content (TPC, mg/L, expressed in gallic acid equivalent (GAE), $n=5$) in aqueous and methanolic (MeOH:H₂O, 1:1, v/v) extracts of *E. strigosus* flowers, leaves and roots (plants collected in 2025).

TPC (mg/L, GAE) in <i>E. strigosus</i> extracts			
	Flower	Leaf	Root
Aqueous	102.44 ± 3.75 ^{a*}	239.36 ± 5.77 ^{b'}	17.17 ± 2.29 ^c
Methanolic	113.36 ± 4.19 ^{d**}	304.94 ± 3.81 ^{e''}	21.46 ± 4.33 ^f

Different superscript letters (a, b, c and d, e, f) indicate significant differences between the TPC values of various plant organs within the species, whereas asterisks and apostrophes show significant differences between *E. strigosus* extract types within the same plant organs ($p \leq 0.05$, by the Wechs's t-test).

Table S3. ABTS^{•+} and DPPH[•] scavenging activity (mmol/L, TROLOX equivalent, $n=5$, n indicates a number of measurements conducted using the same extract) of aqueous extracts from *E. annuus* and *E. strigosus* flowers, leaves and roots (plant material collected in 2024).

ABTS ^{•+} Scavenging activity, TROLOX (mmol/L) of aqueous extracts			
	Flower	Leaf	Root
<i>E. annuus</i>	6.12 ± 0.09 ^{a*}	14.83 ± 0.25 ^b	0.17 ± 0.03 ^c
<i>E. strigosus</i>	6.52 ± 0.16 ^{d**}	15.22 ± 0.13 ^e	0.16 ± 0.02 ^f
DPPH [•] Scavenging activity, TROLOX (mmol/L) of aqueous extracts			
	Flower	Leaf	Root
<i>E. annuus</i>	6.20 ± 0.08 ^a	17.55 ± 0.07 ^{b*}	3.06 ± 0.03 ^{c'}
<i>E. strigosus</i>	6.08 ± 0.04 ^d	16.45 ± 0.04 ^{e**}	3.33 ± 0.10 ^{f''}

Different superscript letters demonstrate significant differences among the ABTS^{•+} and DPPH[•] scavenging activity values of various plant organs within each species, whereas asterisks and apostrophes indicate significant differences between *E. annuus* and *E. strigosus* within the same plant organs ($p \leq 0.05$, using the Wechs's t-test).

Table S4. ABTS^{•+} and DPPH[•] scavenging activities (TROLOX (mmol/L), *n*=5) of aqueous and methanolic (1:1, *v/v*) extracts from *E. strigosus* flowers, leaves and roots (plant material collected in 2025).

ABTS ^{•+} Scavenging activity, TROLOX (mmol/L) of <i>E. strigosus</i> extracts			
	Flower	Leaf	Root
Aqueous	5.91 ± 0.31 ^a	13.96 ± 0.39 ^{b*}	0.24 ± 0.00 ^{c'}
Methanolic	6.60 ± 0.32 ^d	17.15 ± 0.43 ^{e**}	0.67 ± 0.01 ^{f''}
DPPH [•] Scavenging activity, TROLOX (mmol/L) of <i>E. strigosus</i> extracts			
Aqueous	5.53 ± 0.25 ^a	16.26 ± 0.66 ^b	2.83 ± 0.01 ^{c*}
Methanolic	5.96 ± 0.80 ^d	17.50 ± 0.20 ^e	3.29 ± 0.01 ^{f*}

Different superscript letters show significant differences among the ABTS^{•+} and DPPH[•] scavenging capacity values of various plant organs within each species, whereas asterisks indicate significant differences between *E. strigosus* extract types within the same plant organ (column-wise comparison) (*p* ≤ 0.05).

Table S5. Chromatographic separation conditions of *Erigeron annuus* (L.) Pers. and *Erigeron strigosus* Muhl. ex Willd. extracts by gradient elution method (equilibration was for 5 min between runs, max pressure limit was set 400 bars).

Time, min	A, %	B, %
0 (initial)	95	5
25	0	100
28 (from 25 min isocratic mode)	0	100
28.1	95	5



Figure S1. Geographical indication of sampling sites of *E. annuus* (L.) Pers. (Alytus County, Lazdijai district, Šlavantai) and *E. strigosus* Muhl. ex Willd. (Kaunas County, Prienai district, Būdvietis) in Lithuania.



Figure S2. Images of *E. annuus* (L.) Pers. (a) and *E. strigosus* Muhl. ex Willd. (b) plants.

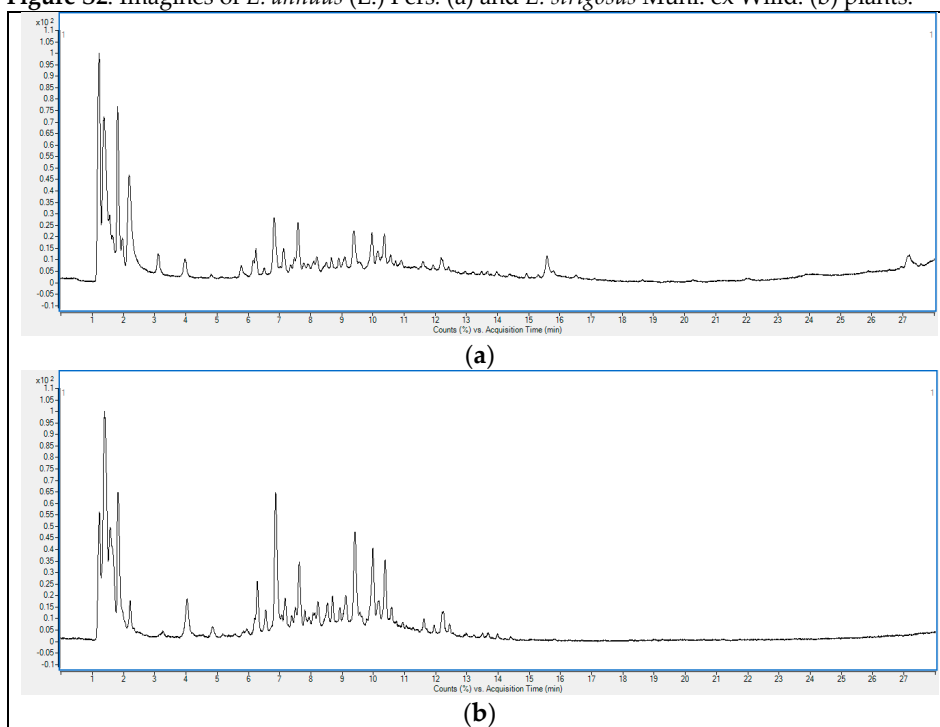


Figure S3. Total ion chromatogram of *E. annuus* leaf extract in a positive (a) and negative (b) ionization mode.

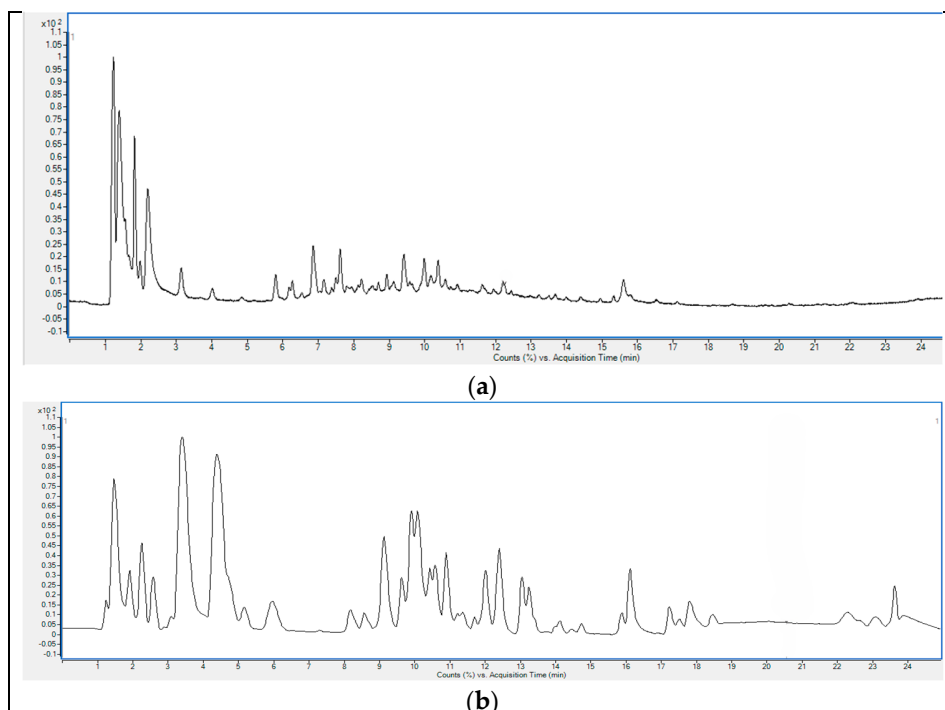


Figure S4. Total ion chromatogram of *E. strigosus* leaf extract in a positive (a) and negative (b) ionization mode.

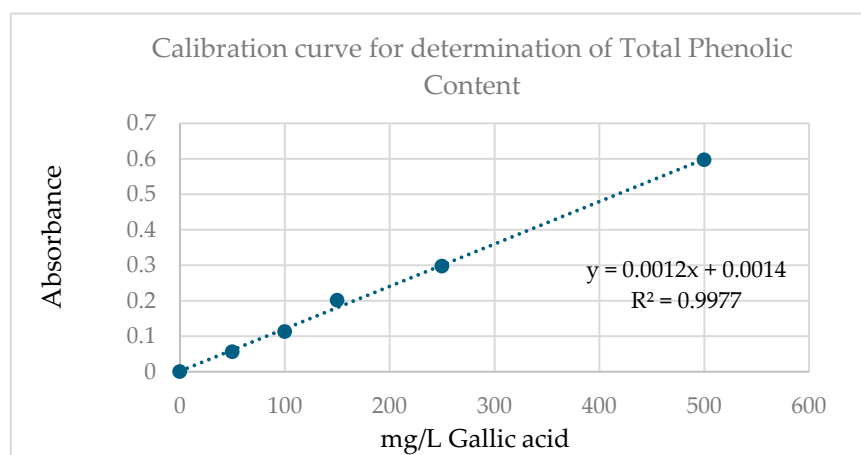


Figure S5. Gallic acid standard calibration curve, using Folin-Ciocalteu method.

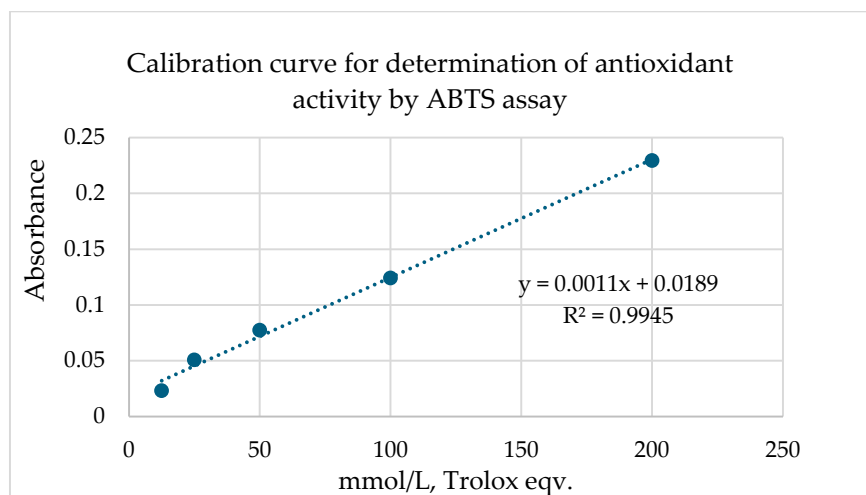


Figure S6. Calibration curve for AA determination by ABTS^{•+} scavenging assay.

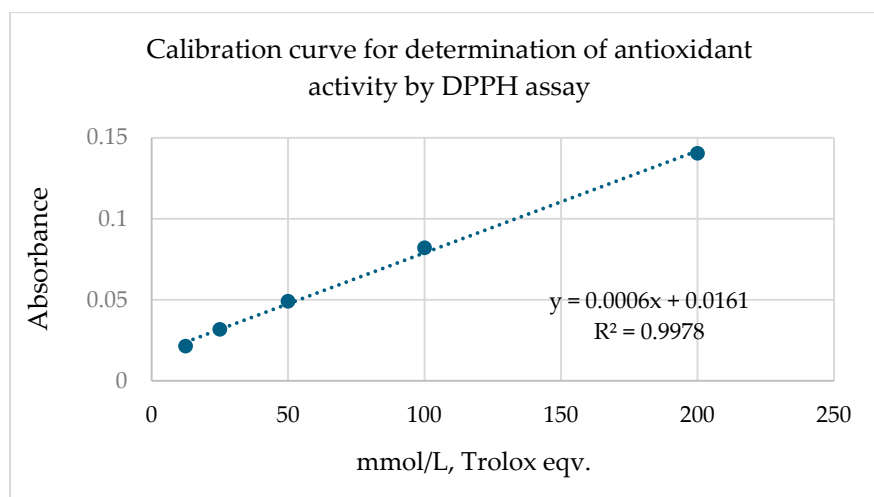


Figure S7. Calibration curve for AA determination by DPPH[•] scavenging assay.