UNIVERSITY OF LATVIA

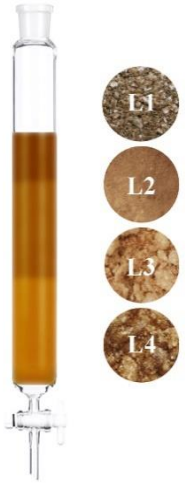
79th International Scientific Conference of the University of Latvia

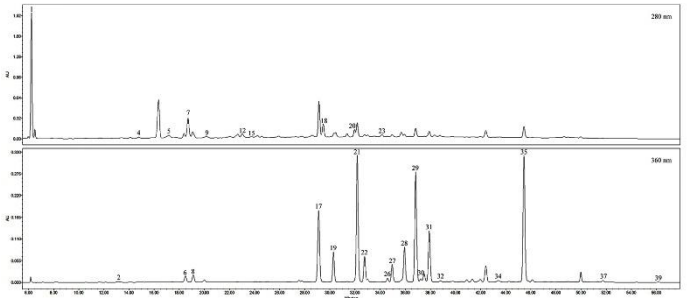
Antioxidant activity of phenolic fractions from *Vaccinium vitis-idaea* L. leaves

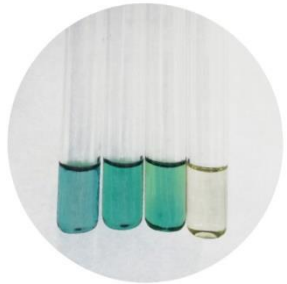
Vilkickyte Gabriele, Raudone Lina

Lithuanian University of Health Sciences, Kaunas, Lithuania

Background, Aim, and Methods







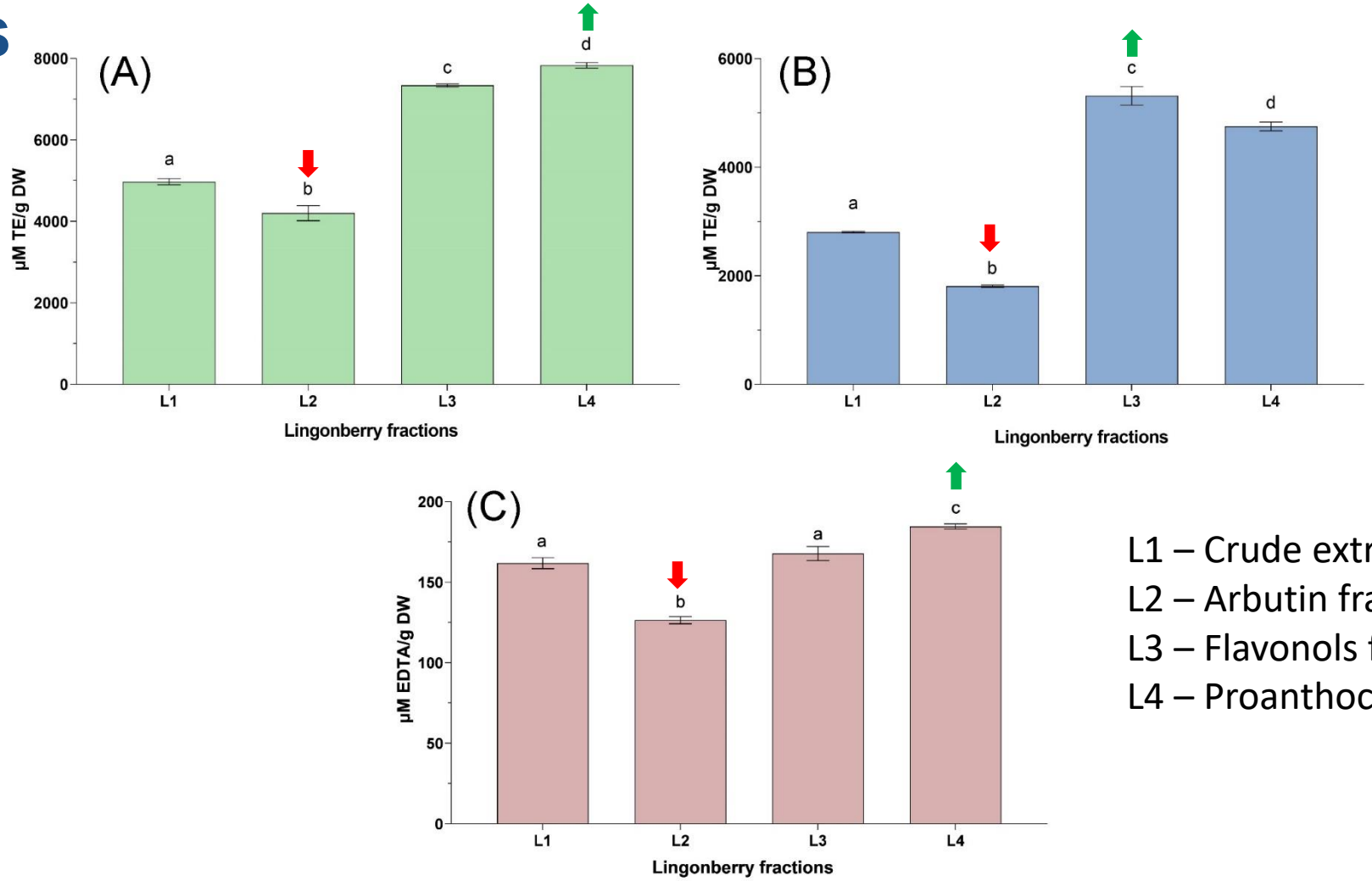
Lingonberry leaves – a good source of antioxidants (phenolics)

Isolation of phenolic fractions (using Sephadex LH-20)

Determination of phenolic composition (by HPLC-PDA)

Antioxidant activity evaluation (by ABTS, FRAP, FIC assays)

Results



L1 – Crude extract
L2 – Arbutin fraction
L3 – Flavonols fraction
L4 – Proanthocyanidins fraction

Fig. 1. Antioxidant activities of different fractions of lingonberry leaves, assessed by ABTS (**A**), FRAP (**B**), and FIC (**C**) assays. Values marked with different letters are significantly different ($p < 0.05$).

Conclusions

1. Antioxidant activity of crude extract and obtained fractions according to average values of all antioxidant activity assays were in the following ascending order: L2<L1<L3<L4.
2. The purified fraction, obtained by the last fractionation step, possessed the greatest antioxidant activity.
3. The predominant compounds of this fraction – proanthocyanidins – can be considered to be antioxidant activity markers of lingonberry leaves.