

Supplementary material

Deep eutectic solvent-based extraction coupled with green two-dimensional HPLC-DAD-ESI-MS/MS for the determination of anthocyanins from *Lycium ruthenicum* Murr. fruit

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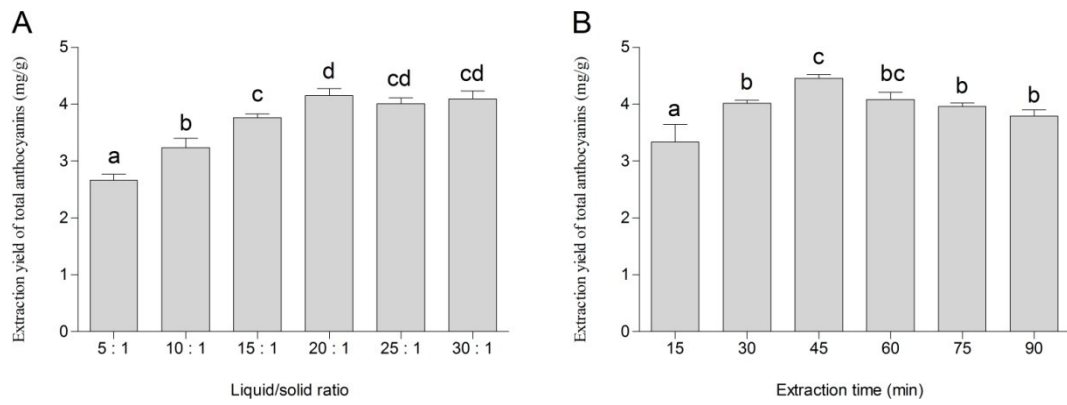


Fig. S1 Effects of liquid/solid ratio (A) and extraction time (B) on extraction yield of total anthocyanins from *L. ruthenicum* fruit. Means with different letters were significantly different at the level of $p < 0.05$.

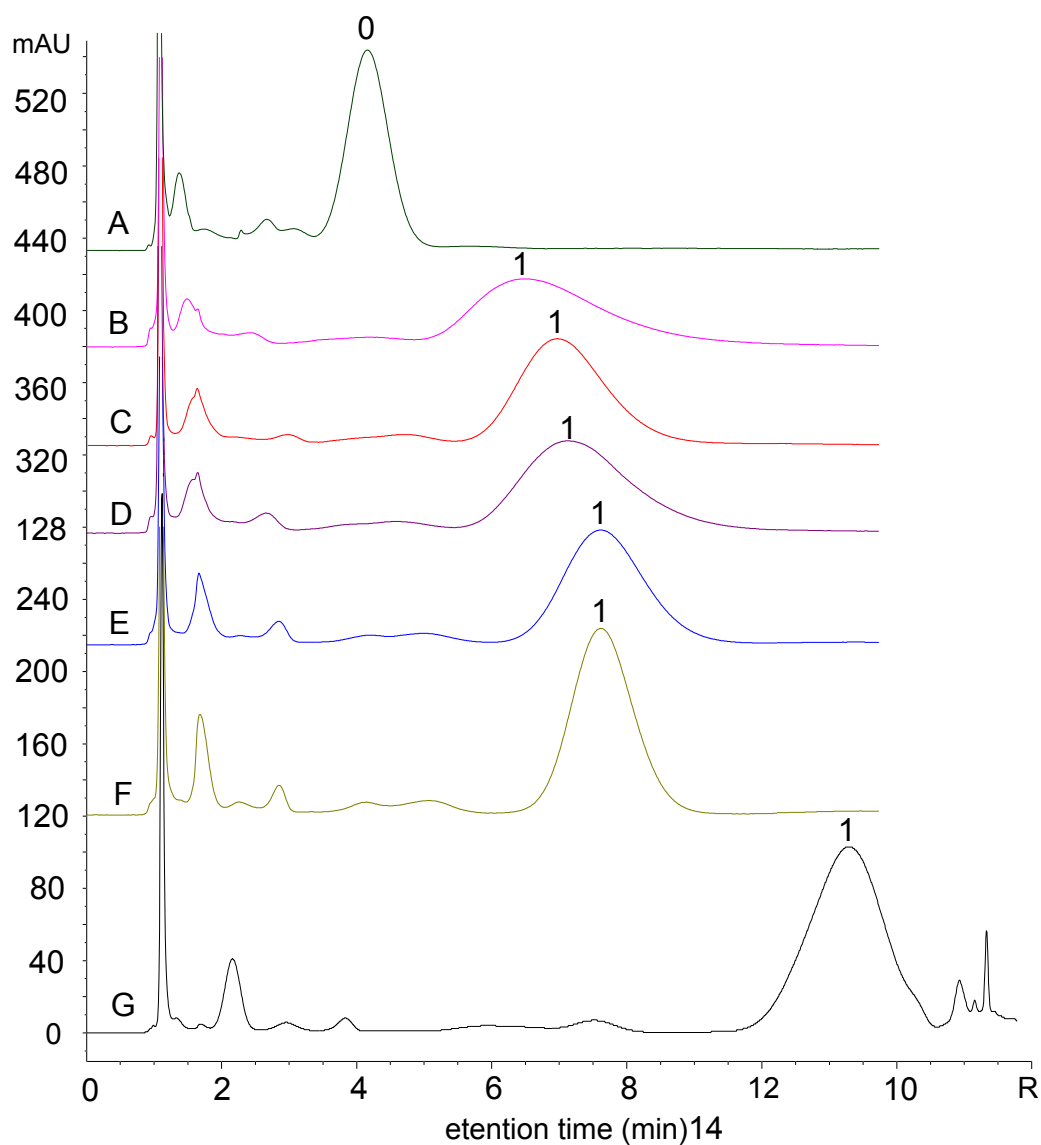


Fig. S2 HPLC-DAD chromatograms of anthocyanins from *L. ruthenicum* fruit using ethanol and fruit acid aqueous solutions (0.1 mol/L) at a ratio of 15:85 (v/v) as mobile phases, including mandelic (A), ascorbic (B), lactic (C), glycolic (D), malic (E), citric (F), and tartaric (G) acids; peak 1, petunidin-3-*O*-(*trans-p*-coumaroyl)-rutinoside-5-*O*-glucoside.

Supplementary Table 1

Physial characteristics of studied macroporous resins.

Resins	Polarity	Surface area (m ² /g)	Pore size (Å)
NKA-9	Polar	250-290	155-165
AB-8	Weak-polar	480-520	130-140
XDA-6	Weak-polar	≥ 650	125
XDA-7	Weak-polar	≥ 800	45
HPD-80	Non-polar	350-400	80-85
D101	Non-polar	400-600	100-110
HPD-100A	Non-polar	600-700	90-100
X-5	Non-polar	500-600	290-300
LS-305	Non-polar	≥ 800	230
LX-68	Non-polar	≥ 980	45-50
LX-32	Non-polar	≥ 1000	- ^a
LX-31B	Non-polar	≥ 1200	- ^a

^a Data are unpublished by resin manufacturer.