SUPPLEMENTARY MATERIAL

Highly Efficient Extraction Procedures Based on Natural Deep Eutectic Solvents or Ionic Liquids for Determination of 20-Hydroxyecdysone in Spinach

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Summary

This supporting information file includes additional results and information as described in the text of the main article including:

Figure S1. Effect of the sample weight (A) and extraction time (B) on 20-E extraction efficiency from spinach using NADES-SLE procedure (NADES, lactic acid: levulinic acid (1:1; v/v)).

Figure S2. Effect of the IL dilution (A), IL pH (B), sample weight (C) and extraction time (D) on 20-E extraction efficiency from spinach using IL-SLE procedure (IL, triethylammonium triacetate).

Figure S3. Comparison IL-SLE and NADES-SLE procedures with another extraction procedures.

Table S1. List of Gutmann donor numbers for anions included in the studied ionic liquids.

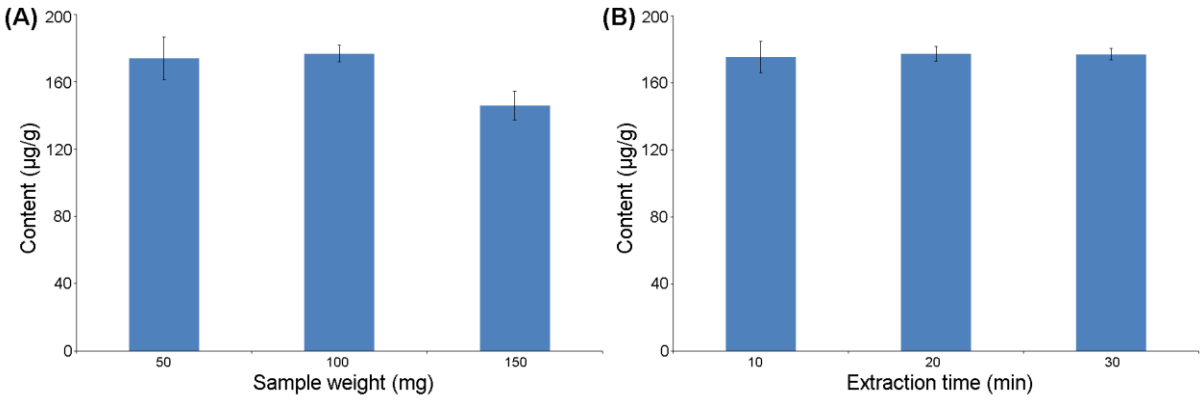

Figure S1. Effect of the sample weight (A) and extraction time (B) on 20-E extraction efficiency from spinach using NADES-SLE procedure (NADES, lactic acid:levulinic acid (1:1; v/v)).

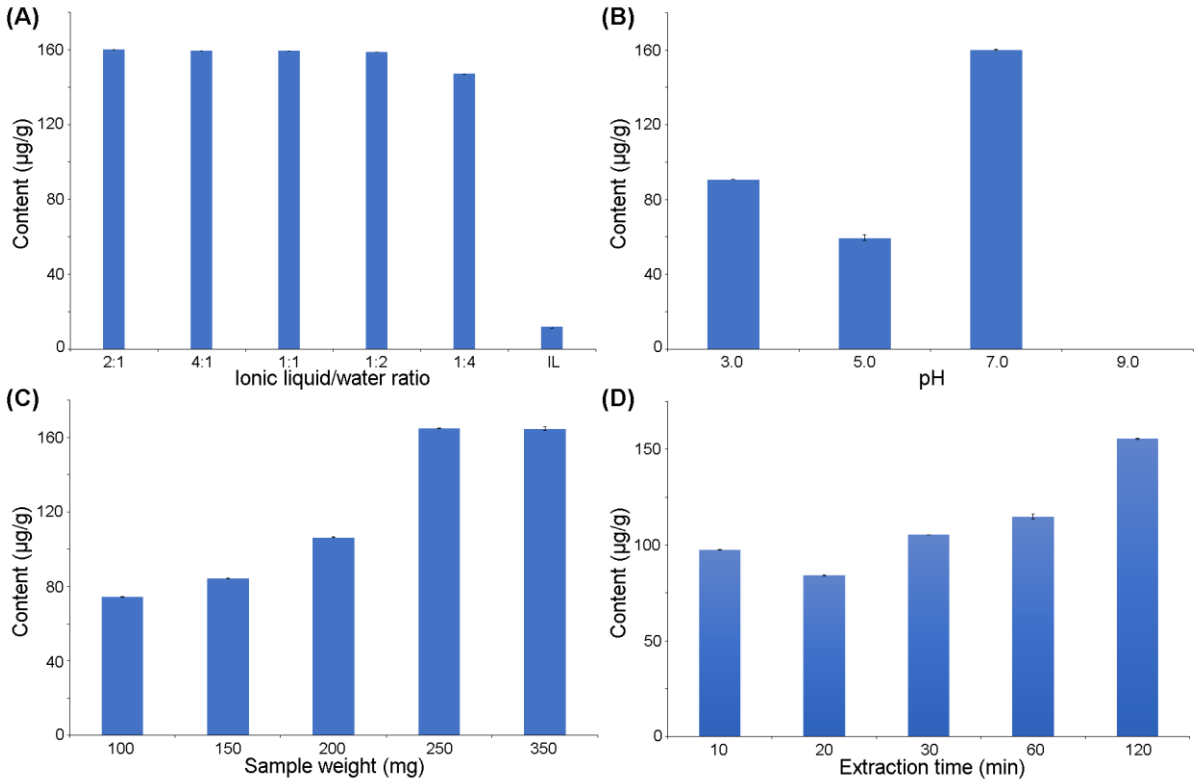

Figure S2. Effect of the IL dilution (A), IL pH (B), sample weight (C) and extraction time (D) on 20-E extraction efficiency from spinach using IL-SLE procedure (IL, triethylammonium triacetate).

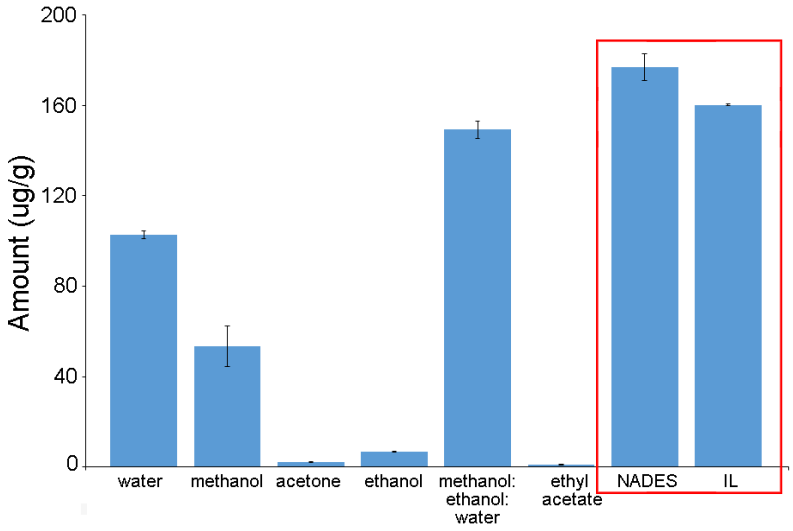

Figure S3. Comparison of NADES-SLE and IL-SLE procedures with conventional extraction solvents.

Table S1. List of Gutmann donor numbers for anions included in the studied ionic liquids.

Anion of the IL	Gutmann donor number (DN)
NTf_2^-	11.2
OTf^-	20.4
$OcSO_4^-$	20.6
$EtSO_4^-$	22.3
$MeSO_4^-$	–
$AlCl_4^-$	24.3
Cl^-	72.2
$(OAc)_3^-$	126.9