**Supporting Information**

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# Comparative Analyses on Chemical Constituents and Biological Activities of *Laserpitium siler* L. from Serbia

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**S1: Solvents and Chemicals**

The organic solvents were procured from Zorka pharma (Serbia) and Fisher Scientific (UK). Sodium carbonate anhydrous was purchased from Centrohem d.o.o, Serbia. Sodium dihydrogen phosphate and disodium hydrogen phosphate were obtained from VWR Bdh Prolabo Chemicals, Belgium, and aluminum nitrate nonahydrate from Carlo Erba Reagents S.A.S., France. Potassium peroxydisulphate, L(+)–ascorbic acid, and linoleic acid were obtained from Acros organics, Fisher Scientific UK; ABTS from PanReac/ApplyChem, ITW reagents. BHT and quercetin hydrate were purchased from TCI Europe NV, Belgium. Tween 40 and 1% starch water solution were obtained from Carl Roth GmbH + Co. KG, Germany. Mueller–Hinton agar, malt agar, sabouraud dextrose broth, and tryptic soy broth were obtained from Torlak, Serbia. Streptomycin and ampicillin solutions (1 mg/mL) were obtained from (Sigma–Aldrich Co., USA), while dimethyl sulfoxide was from Merck KGaA, Germany. Diflucan (containing 50 mg fluconazole) was purchased from Pfizer PGM, France. Other chemicals were ordered from Sigma–Aldrich Co., USA.

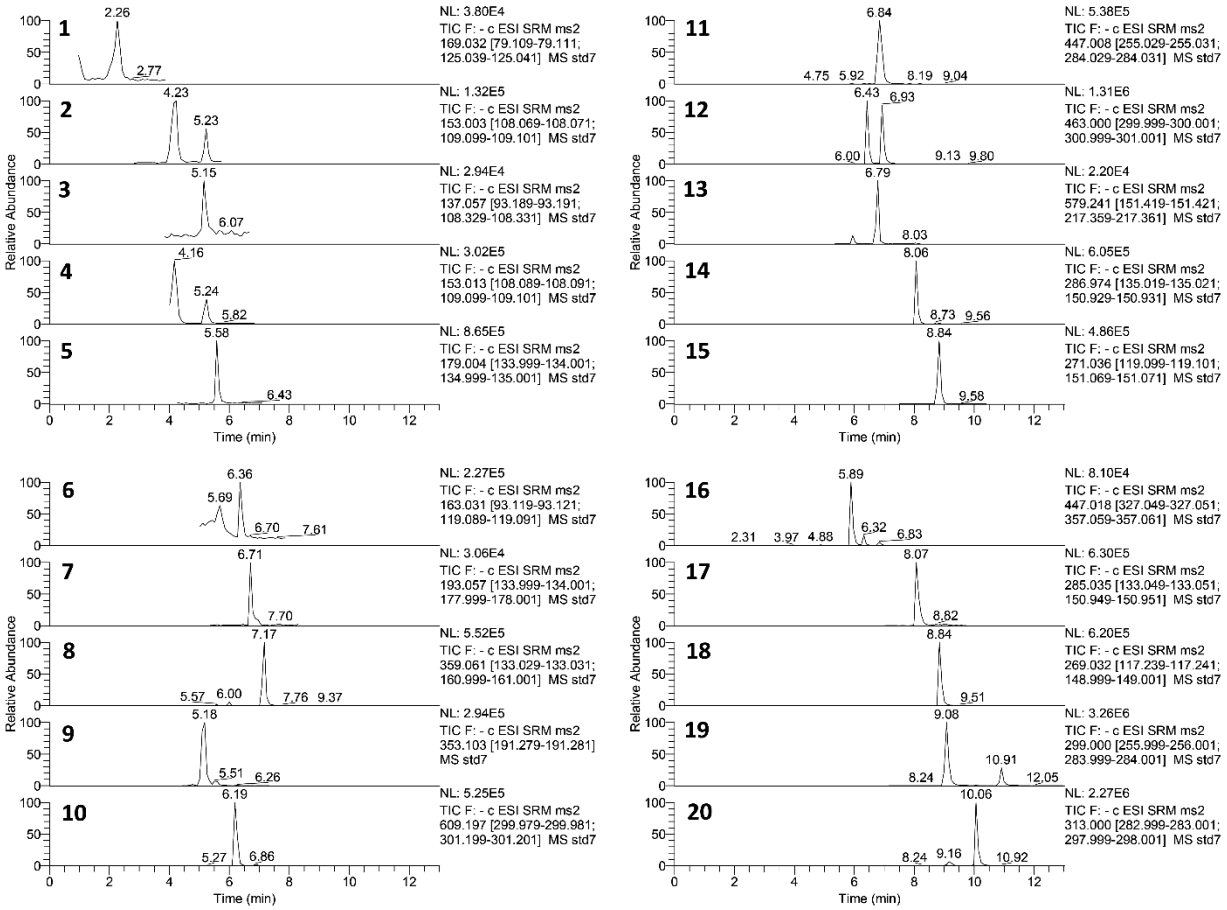


**Figure S1:** Extracted-ion chromatograms (EICs) of all standard compounds used for the quantification

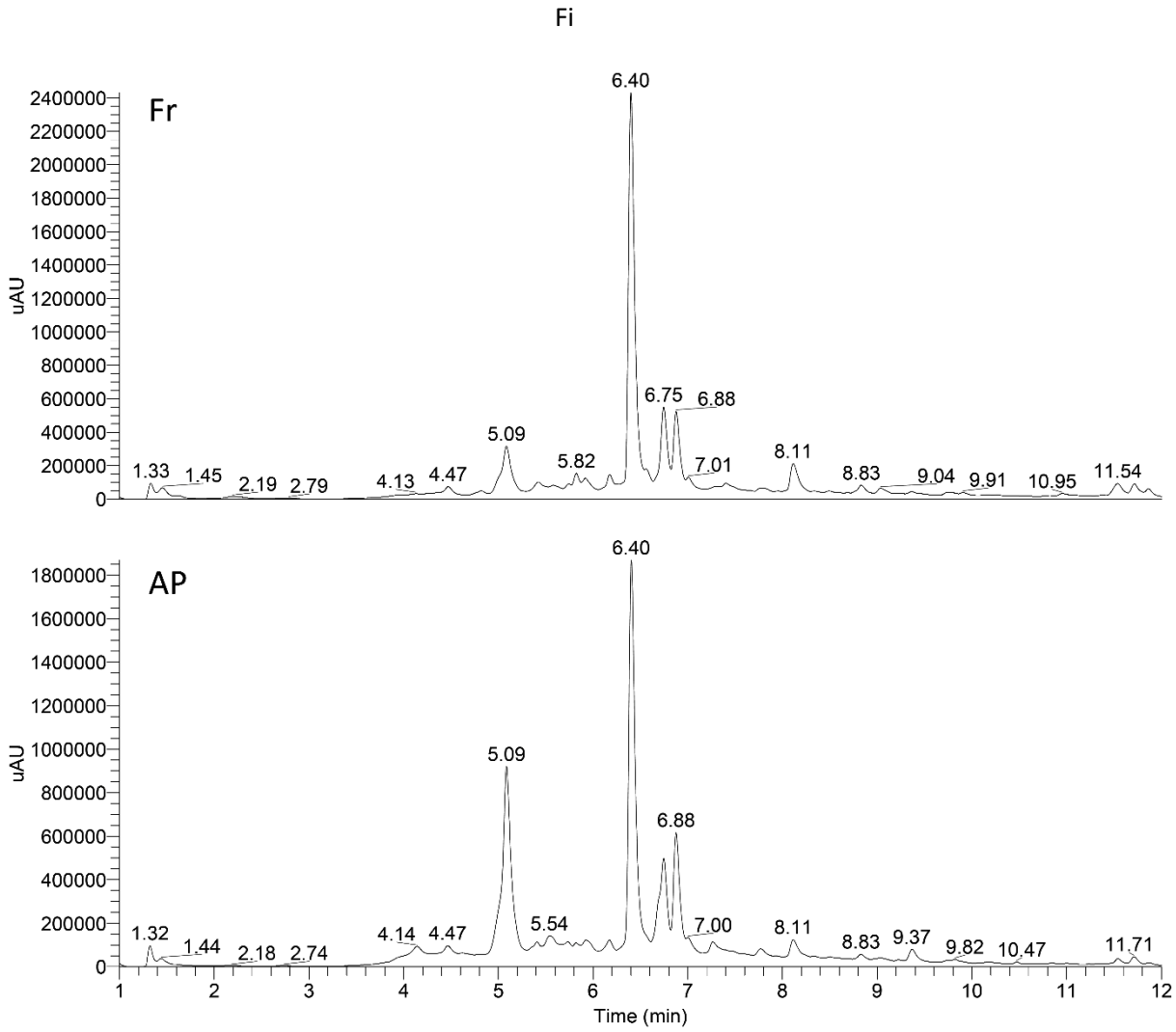


**Figure S2:** HPLC-UV chromatograms of the extracts at 254 nm.

**Table S1:** The retention times, molecular and fragment ions, linearity, R2, LOD, and LOQ, of the studied analytes

| No | Compounds | $t_R$, min | Molecular ion, *m/z* | Fragment ions, *m/z* | Linearity, Y=A+BX | $R^2$ | LOD, mg/L | LOQ, mg/L |
|---|---|---|---|---|---|---|---|---|
| **1** | **Gallic acid** | 2,26 | 169,032 | 79.11; 125.04 | Y=-23396+518626*X | 0,9905 | 0,12 | 0,41 |
| **2** | **Protocatechuic acid** | 4,23 | 153,003 | 108.07; 109.10 | Y=-18147+1877190*X | 0,9991 | 0,04 | 0,12 |
| **3** | ***p*-Hydroxybenzoic acid** | 5,15 | 137,057 | 93.19; 108.33 | Y=-139122+395792*X | 0,9974 | 0,04 | 0,13 |
| **4** | **Gentisic acid** | 5,24 | 153,013 | 108.09; 109.10 | Y=10512+1111828*X | 0,9962 | 0,08 | 0,25 |
| **5** | **Caffeic acid** | 5,58 | 179,004 | 134.00; 135.00 | Y=-117581+5582020*X | 0,9917 | 0,11 | 0,38 |
| **6** | ***p*-Coumaric acid** | 6,36 | 163,031 | 93.12; 119.09 | Y=-40831+3663549*X | 0,9924 | 0,10 | 0,33 |
| **7** | **Ferulic acid** | 6,71 | 193,057 | 134.00; 178.00 | Y=7867+1007046*X | 0,9979 | 0,04 | 0,13 |
| **8** | **Rosmarinic acid** | 7,17 | 359,061 | 133.03; 161.00 | Y=270951+11685000*X | 0,9900 | 0,13 | 0,43 |
| **9** | **5-*O*-Caffeoylquinic acid (Chlorogenic acid)** | 5,18 | 353,103 | 191,28 | Y=-231260+14073639*X | 0,9935 | 0,09 | 0,30 |
| **10** | **Quercetin 3-*O*-rutinoside (Rutin)** | 6,19 | 609,197 | 299.98; 301.12 | Y=-203467+14458551*X | 0,9917 | 0,08 | 0,26 |
| **11** | **Kaempferol 3-*O*-glucoside (Astragalin)** | 6,84 | 447,008 | 255.03; 284.03 | Y=60589+10598839*X | 0,9933 | 0,07 | 0,24 |
| **12** | **Quercetin 3-*O*-glucoside** | 6,43 | 463,000 | 300.00; 301.00 | Y=-265723+19191348*X | 0,9919 | 0,05 | 0,18 |
| **13** | **Naringin** | 6,79 | 579,241 | 151.42; 217.36 | Y=610+446517*X | 0,9975 | 0,04 | 0,14 |
| **14** | **Eriodictyol** | 8,06 | 286,974 | 135.02; 150.93 | Y=-371404+209489*X | 0,9914 | 0,08 | 0,27 |
| **15** | **Naringenin** | 8,84 | 271,036 | 119.10; 151.07 | Y=-243304+11446526*X | 0,9952 | 0,06 | 0,20 |
| **16** | **Apigenin 8-*C*-glucoside (Vitexin)** | 5,89 | 447,018 | 327.05; 357.06 | Y=-594198+19662506*X | 0,9900 | 0,09 | 0,29 |
| **17** | **Luteolin** | 8,07 | 285,035 | 133.05; 150.95 | Y=-614892+18361197*X | 0,9944 | 0,07 | 0,22 |
| **18** | **Apigenin** | 8,84 | 269,032 | 117.24; 149.00 | Y=229851+11479312*X | 0,9910 | 0,11 | 0,36 |
| **19** | **Hispidulin** | 9,08 | 299,000 | 256.00; 284.00 | Y=-784477+1538020*X | 0,9980 | 0,04 | 0,13 |
| **20** | **Cirsimaritin** | 10,06 | 313,000 | 283.00; 298.00 | Y=-466962+35014620*X | 0,9970 | 0,06 | 0,21 |