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KEMIJSKIH INŽENJERA I
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TODAY SCIENCE – TOMORROW INDUSTRY

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9. SUSRET MLADIH KEMIČARA

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$$Re = \frac{vdp}{\eta}$$

ZNAŠ ŠTO
BI SE DOGODILO DA
SE SILVER SURFER
I IRON MAN
UJEDINE?

ZNAM....
POSTALI BI
LEGURA!





SKUP LABORATORIJSKIH TEHNIČARA

I. SKUP LABORATORIJSKIH TEHNIČARA

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VOLATILE ORGANIC COMPOUNDS AND FATTY ACID CONTENT OF GREEN MACROALGAE *Ulva lactuca*

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Since macroalgae represent a valuable source of various bioactive compounds it is important to investigate their chemical profiles that will lead to the better understanding of marine algal biodiversity in the Adriatic Sea, in this case *Ulva lactuca*.

Total of 28 compounds were extracted by HS-SPME and identified by GC-MS with relatively different compounds abundance among the fibers. Unsaturated alkane heptadec-8-ene ranged in the headspace from 21.80% to 12.46%. Other abundant compounds were lower aldehydes heptanal and nonanal, followed by minor percentages of pentanal, hexanal, octanal and decanal. Benzyl alcohol and benzaldehyde were the main benzene derivatives in the headspace. Total lipids were extracted using the Folch method and analysed using GC-FID. Twelve (12) fatty acids were identified. The content of palmitic, oleic acid isomers and arachidic acid consist more than 70% of total identified fatty acids (45.16%, 13.59% and 14.57%, respectively).

Keywords: *Ulva lactuca*, bioprospecting, fatty acids, volatiles, extraction

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