Chemical Composition of the Defensive Secretion from *Pachyiulus Varius* (Fabricius, 1781) (Diplopoda, Julida)

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Numerous millipede species produce a defensive secretion that contains a variety of volatile compounds grouped into alkaloids, quinones, phenols, and esters.[1] Chemical composition of defensive secretion is unknown for the majority of members of the genus *Pachyiulus* Berlese, 1883 and up to now analyses of secretion constituents were done only for *P. hungaricus* and *P. cattarensis*.[1,2] Herein, mass spectra (MS), gas chromatographic data (GC(RI)), synthesis, and chemical transformations of crude extracts (synthesis of dimethyl disulfide adducts and transesterification), enabled the identification of more than 90 constituents of the defensive secretion of *Pachyiulus varius* (Fabricius, 1781) from Serbia. The analyzed samples contained, along with the ubiquitous quinones, alkanes, 1-alkenes, and long-chain *n*-esters, a homologous series of, predominantly hexyl, esters of *n*- and branched (*iso*- and *anteiso*-) long-chain (un)saturated acids. Thirty-nine identified esters represent new natural products that could be excellent chemotaxonomic markers for *Pachyiulus* species.

Keywords: *Pachyiulus varius*, defensive secretion, GC-MS, esters

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References

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