



## IX\_PP3\_Analysis of diterpenoids from the latex of *E. seguieriana* Neck. subsp. *seguieriana* by liquid chromatography–electrospray ionisation mass spectrometry

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The genus *Euphorbia* (Euphorbiaceae) is composed of a latex-bearing species well known for the chemical diversity of their isoprenoid constituents. Over 650 diterpenoids, with diversified macrocyclic and polycyclic skeletons, including ent-abietanes, ent-atisanes, ent-kauranes, ent-pimaranes, ent-isopimaranes, casbanes, jatrophanes, lathyranes, jatrophanes, daphnanes, tiglianones, ingenanes, segetanes, paralianes, pepluanes, myrsinanes and euphoractines, specific to the Thymelaeaceae and Euphorbiaceae families, have been isolated from these plants. These compounds show the wide range of therapeutically relevant biological activities (e.g., antitumor, cytotoxic, multi-drug-resistance-reversing, and anti-viral properties, various vascular effects, and anti-inflammatory activity) [1].

*E. seguieriana*, a species with several varieties occurring from Europe to Pakistan and north-western China, is a perennial herbaceous flowering plant that reaches a height of up to 60 cm. Its latex is used to treat wounds and warts on the skin [2]. So far, ingenols [3], diterpene lactones of the abietane type, myrsinanes, a tetracarboxylic diterpene related to myrsinane [4], and diterpenes structurally related to 17-hydroxymyrsynol, cyclomyrsinol and lathyranone [5], have been isolated from *E. seguieriana* Neck. subsp. *seguieriana*.

In this study, we analysed the chloroform extract of the latex of *E. seguieriana* Neck. subsp. *seguieriana* collected on Deliblato sand in flowering season by reversed-phase liquid chromatography–electrospray ionisation mass spectrometry (LC-ESI MS). From the data obtained from LC-ESI MS analysis, premyrsinane, myrsinane and lathyranone nicotinoyl esters are the dominant diterpene metabolites of the latex. In the continuation of the research, compounds will be isolated, their structures elucidated, and their biological activities examined.

### References

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