

Quantitative determination of total triterpenoids in exudates of *Thymus* species

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ФОНД
НАУЧНИ
ИЗСЛЕДВАНИЯ
МИНИСТЕРСТВО НА ОБРАЗОВАНИЕТО И НАУКАТА



Studied *Thymus* species

Section Hyphodromi:

Thymus atticus
T. perinicus
T. striatus
T. zygoides

Section Serpyllum:

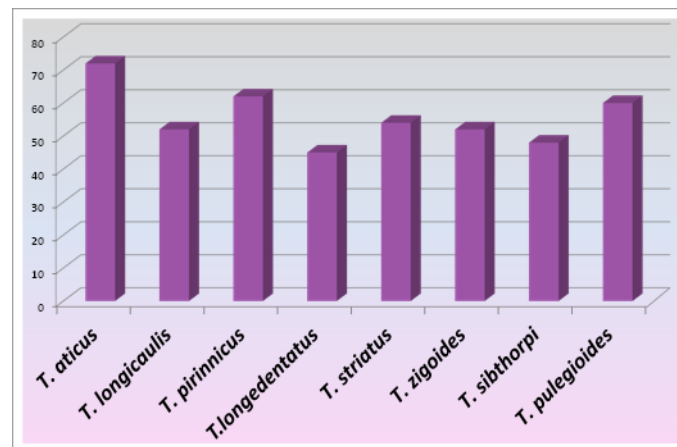
T. longedentatus
T. longicaulis
T. pulegioides
T. sibthorpii

Triterpene acids are compounds with important biological and pharmacological activity. Simonyan et al., 1972, have described the rapid and easy method for the quantitative determination of triterpenoids. The method is based on the reaction of triterpenes with concentrated sulfuric acid whereupon they are oxidized and form colored products that can be measured spectrophotometrically in the 310 nm region. This spectrophotometric analysis was applied to assess quickly and easily the content of triterpenoids of eight *Thymus* species exudates. The plant material was collected from their natural localities. Exudates were obtained from dry, not ground plant material by washing with acetone to dissolve the exudate material.

CONSLISION

The established high levels of triterpenoids in the *Thymus* exudates define them as promising fractions for the study of antitumor and antimicrobial activities.

Total triterpene content in exudates of Bulgarian *Thymus* species



The triterpenoid content was expressed as percent (%) in exudate in equivalent of oleanolic acid. The highest content of triterpenoids was found in *T. perinicus*, *T. pulegioides*, *T. striatus*, *T. atticus*, *T. longicaulis* exudates.



Reference: Simonyan, A.V., Shinkarenko, A.L., Oganessian E.T. 1972. Quantitative determination of triterpenoids in plants of the genus *Thymus*. Chemistry of Natural Compounds, 8 (3), 290–291.

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