

OP26. STUDY OF THE NON-POLAR COMPONENTS OF THE ENDOPHYTIC FUNGUS *OVATOSPORA SENEGALENSIS* FROM FLOWERS OF *VERNONIA ANTHELMINTICA*

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The non-polar compounds are very important organic molecules that play a key role in the manufacture of various drugs, membranes, mechanical oils, dyes, and some important fine chemicals. The production of non-polar compounds by microbial fermentation is convenient and fast. This paper presents the obtained experimental data on the study of the non-polar components isolated from the culture filtrate of the endophytic fungus *Ovatospora senegalensis* isolated from the flowers of the plant *Vernonia anthelmintica*, used in traditional Chinese and Uyghur medicine. The supernatant of the endophytic fungus *O. senegalensis* was extracted with petroleum ether, dichloromethane and ethyl acetate, successively. The non-polar components of these extracts were analyzed by GC-MS. The GC-MS analysis of the petroleum ether, dichloromethane and ethyl acetate extracts detected 36 compounds in comparison with the NIST library based on the peak area (%), molecular weight, retention time, and CAS number. The identified compounds appeared to belong to different chemical classes including tert-butyl phenol compounds, fatty acid methyl esters, hydrocarbons, aldehydes, benzoquinones, pyrroles, and terpenes. The highest number of compounds were identified from the ethyl acetate extract (15 compounds). In the petroleum ether extract, 13 compounds were identified, whereas the dichloromethane extract showed 8 compounds. Major components of these extracts are 9- octadecenoic acid (Z)- methyl ester (8.0%), 1,4-benzenedicarboxylic acid, dimethyl ester (72.9%), cholesterol (30.7%), phenylethyl alcohol (16.6%), dibutyl phthalate (26.3%), diisooctyl phthalate (27.9%), benzenepropanoic acid, 3,5-bis (1,1-dimethylethyl)-4-hydroxy-, octadecyl ester (5.2%), 1 2-bis(trimethylsilyl)benzene (13.3%). It should be noted that 1,4-benzenedicarboxylic acid, dimethyl ester was the main compound in almost all extracts.

ACKNOWLEDGMENT This work was supported by the West Light Foundation of the Chinese Academy of Science (2021-XBQNXZ-026), the Central Aisan Drug Discovery and Development Center of Chinese Academy of Sciences (CAM202101), Xinjiang Uygur Autonomous Region Tianshan Yingcai-Leading Talents in Scientific and Technological Innovation (2022TSYCLJ0008), Xinjiang Uygur Autonomous Region Tianshan Cedar Plan - Science and Technology Innovation Leaders Reserve Candidate Program (2020XS08), and the Chinese Academy of Sciences president's international fellowship initiative (2022VBA0015).

Keywords: *Ovatospora*; *Veronina*; extract

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