**Abstract**

Objective: The objective of the present study was to determine the chemical compounds present in the nests of the mud dauber wasp, Sceliphron caementarium.Methods: Gas chromatography-mass spectrometry analysis of the nest samples was carried out by standard procedures. The resultant compounds were compared with the database of the National Institute Standard and Technology (NIST), WILEY8, FAME.Results: The results of the gas chromatography-mass spectrometry analysis of the concentrated ethanol extract revealed the presence of chemical compounds such as methylene chloride, 1, 1’:3’, 1’’-Terphenyl, 5’-Phenyl, Di N Decylsulfone, Eicosanoic acid, 1, 2-Bis (Trimethylsilyl) Benzene, and Androstane-11, 17-Dione, 3-[(Trimethylsilyl) Oxy]-, 17-[O-(Phenylmethyl) O.Conclusion: The compounds identified were found to have biological properties such as anti-inflammatory, antibacterial, and antifungal, and further study of these isolated compounds may prove their medicinal importance in future