GC-MS and Bioactivity of the Essential Oil of Senecio rowleyanus Jacobs

Miriam Fouad Yousif

Professor

Abstract

The chemical composition of the essential oil of Senecio rowleyanus Jacobs obtained by hydro distillation was analyzed by GC-MS and tested for cytotoxic and antimicrobial activities. Twenty five components representing 99.95% of the oil composition were identified. The oil was found to contain a significant amount of sesquiterpene alcohols of the guaiane type. Spathulenol (22.9%), germacrene B (12.4%), myrcene (12.8%) and viridiflorol (11%), were the predominant components. The oil exhibited marked cytotoxic activity against certain brain and liver human cell lines in vitro. In addition, it showed noticeable antimicrobial effect against the test microorganisms.

Pharmacognosy Magazine - 2008, January