A thin layer chromatography (TLC) and gas chromatography (GC) analysis of a volatile oil extract derived from the plant Varthemia iphionoides (Compositae) confimied the possible pres- ence of as many as 35 compounds. Initially, the identification of five known compounds, namely, cineole, camphor, thymol, linalool and a-telpineole were thought to be present but after using three modified GC conditions, it was concluded that only cineole, camphor and thymol could be identified from the oil extract. The volatile oil- content of the aerial parts was 1.25% from the plant picked just showed significant relaxant effects on acetylcholine induced contraction of the small intestines isolated from rabbits.