

Abstract:

The objective of our work is the study of the products of the secondary metabolism, and more especially the flavonoids of some species of the Algerian flora, which did not see studies of the point of view chemical composition.

Even if they are two families among the most known of the plant world. This family has been known for a long time as a food source (parsley, celery, carrot, fennel, coriander ...) and known in traditional medicine, for its anti-inflammatory, diuretic and antispasmodic properties ...

Four compounds have been isolated from the aerial parts of the species *solanum rostratum* belongs to the solanaceae family; two products have been identified of which four are mentioned for the first time in the genus. And nineteen others of the species *galactites elegans* belong to the family *ASTRACEAE*. All products have been cited for the first time in the genre. To achieve our objectif, we used different extraction, separation and purification methods based mainly on chromatographic techniques, which allowed us to separate the twenty-three products from the aerial parts of these species.

The separated products were identified by spectral methods of analysis, especially nuclear magnetic resonance spectroscopy and its sequences (NMR-¹H, NMR-¹³C,, COSY, HSQC and HMBC), UV-Visible and mass spectroscopy and also chemical analyzes for some products.

The majority of the compounds isolated from the hydromethanolic extract of the species *S. rostratum*, *G. elegans* showed a great capacity of the antioxidant power.

Key words: *Solanum rostratum*, Asteraceae, Solanaceae *Galactites elegans*, Flavonoids, Terpene, Chromatography, 1D and 2D NMR and Mass Spectrometry, Antioxidant Activity.