

**O 18. CURRENT KNOWLEDGE ON ANTIOXIDANT ACTIVITY AND INHIBITORY PARTICULARITIES OF CISTUS INCANUS (L.) COLLECTED IN CENTRAL ALBANIA**

Orjeta LITA<sup>1</sup>

<sup>1</sup>*Faculty of Biotechnology and Food, Agricultural University of Tirana, Koder Kamza, Tirana 1000, Albania*

E-mail: [orjetalita29@gmail.com](mailto:orjetalita29@gmail.com)

**ABSTRACT:** Cistus genus (Cistaceae) comprises several medicinal plants used in traditional medicines to treat several pathological conditions including hyperglycemia. These include Cistus incanus still not fully explored as a source of metabolites with therapeutic potential for human diseases. The recent developments of Albanian highlight that economy of Medicinal & Aromatic Plants (MAP) hold a very special place within national economy. Following historical data during the communist era, exports of MAPs earned close to \$50 million. Based on scientific findings of the Cistus species extracts, this genus offers an adequate reserve of active phytochemicals since many have been used to create drugs. Therefore, this review work can serve society by providing a global view on Cistus L. sp. regarding pharmacological potentials and their chemical profiles. The main purpose of this article is based on analyses of essential oils extracted from Cistus incanus and further on analyses conducted in premises of Essential Laboratory in Elbasan. The essential oil, isolated by hydrodistillation from fresh lowers of Cistus incanus L. collected in different localities River Shkumbini watershed, was investigated by Gas chromatography (GC) method. The GC analysis of the oil revealed the presence of 18 constituents, of which  $\alpha$ -Pinene (22%), camphor (19.1%), terpineol (13.20%), camphene (11.09%) and linalil acetate (5.23%) were the major, constituting altogether almost 74.60% of total composition. Based on our first analyses data it can be confirmed that antioxidant Activity and inhibitory particularities of Cistus incanus (L.) collected in Shkumbini Basin are of significant importance, while further comprehensive studies are needed.

*Keywords: Central Albania, Cistus sp., Phytochemicals, Plant Species, Medicals, GC*