

# Comparable study on essential oil of *Salvia officinalis* L. from different areas of Albania

BRUNILDA MYFTARI<sup>1</sup>, VILMA TOSKA<sup>1</sup>,  
URAN ASLLANI<sup>2</sup>

<sup>1</sup>) University of Tirana, Faculty of Medicine, Department  
of Pharmacy, Rr. Dibrës, 371, Tirana, Albania  
e-mail: bnmaph@yahoo.com  
<sup>2</sup>) Alb-Ducros-Tirana, Albania

## Introduction

*Salvia officinalis* L. is a very important aromatic and medicinal plant. Albania exports it every year. In a comparable study, the chemical composition of essential oil to determine which population of sage plant growing in Albania has the best values to be used in herbal preparations. The essential oil is collected by hydrodistillation (Florence) or via water steam. Then via GC method is analysed for the content areas in Albania during some vegetative phases. The chemical composition of essential oil components, especially in quantity of thujans and camphor. It is determined the best quality.

## Experimental section

### MATERIALS

Plants *Salvia officinalis* L. gathered in 2 different areas (Lezha, Durrës, Berat, Tepelenë, Doka3) during different vegetative phases (from flowering to autumn).

### METHODS

#### Extraction of essential oil

The essential oil is obtained by steam distillation from fresh leaves and flowers of *Salvia officinalis* L. in the special type (Dawson). The distillate is collected with cold water.

#### Transmission of essential oil

To identify and determine the percentage of components in the essential oil, it is used Gas chromatography method.

### CHROMATOGRAPHY

Determination of chemical composition of each sample via GC type Shimadzu with capillary nonpolar column detector type FID, split 1:50, carrier flow 100 cPa, air 50 MPa, split ratio 5:1, flow rate 1 ml/min, temperature 80°C, final temperature 220°C, temperature gradient 4°C/min, temperature of injector 200°C, carrier flow rate 1 ml/min, volume injected 2 µL. The identified components were identified by retention time and by parallel chromatograms of each case.

