

Analytical study of *Cassia absus* and *Thymelaea lythroides*

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Abstract

Studies on medicinal plants are mostly based on information provided by traditional healers in ethnobotanical surveys. This is why we conducted an ethnopharmacological survey among patients of the National Institute of Oncology in Rabat, to compile a list of medicinal plants used in phytotherapy of cancer. Two plants were selected following this investigation, namely *Cassia absus* (*Fabaceae*) and *Thymelaea lythroides* (*Thymelaeaceae*). These two plants were first studied by botanists for accurate scientific identification. Dichloromethane extracts of these plants have been studied by different chromatographic methods to isolate mean fractions and to study their chemical composition. These investigations revealed the presence of some known constituents as (3 β)-Lup-20(29)-en-3-ol (lupeol), 5,5'-(1S,3aR,4S,6aR)-Tetrahydro-1H,3H-furo[3,4-c]furan-1,4-diylbis(1,3-benzodioxole) (sesamin), 17-(5-Ethyl-6methylheptan-2-yl)-10,13-dimethyl-2,3,4,7,8,9,11,12,14,15,16,17-dodecahydro-1H- cyclopenta[a]phenanthren-3-ol (beta-sitosterol), which have already been proven to have anticancer activity. Besides the study of the dichloromethane extract by GCxGC/MS revealed interesting chemical unknown compounds.

Key word: *Cassia absus*, *Thymelaea lythroides*, Phytotherapy, Chemical analysis, Anticancer activity.

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