

# Two New Flavonol Glycosides as DNA Topoisomerase I Poisons

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*Retama sphaerocarpa*, Rhamnazin, Topoisomerase

Flavonoids are secondary plant metabolites whose anticancer properties are actually being studied from an epidemiological and pharmacological point of view. They are believed to be implicated in the lower risk of some forms of cancer observed in Asian countries, due to their capacity to control cell proliferation, to act on certain regulatory enzymes as protein kinases or topoisomerases. Based on these precedents, three flavonols isolated from a cytotoxic butanol extract from *Retama sphaerocarpa* Boissier have been assessed to study their topoisomerase I and II activity. Two new rhamnazin glycosides were found to have the ability to stabilize the cleavage complex human DNA topoisomerase I at concentrations in the 100–250  $\mu\text{M}$  range, acting as topoisomerase I poisons.