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New macrocyclic diterpenes from *Euphorbia connata*

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Background and Aims: Recently macrocyclic diterpenes in spurge family is considered to find effective compounds on cancer cell lines, control and suppress the immune system and angiogenesis. In Iran, 70 species of euphorbiaceae are reported, 17 of which are endemic. Among them, Euphorbia connata, endemic to Iran, is selected by the authors to isolate a number of diterpenes in order to introduce them as lead compounds for new drug discovery.
Methods: The compounds were purified using column chromatography run by Merck, Silica gel, and HPLC column YMC Pack-Sil, (25*300 mm). The structures of the isolated compounds were elucidated by 13C- and 1H-NMR as well as 2D-NMR, IR and by the aid of mass fragmentation pattern and comparing with the literature.
Results: In this research, dried acetone:chloroform extract (1:2) of aerial parts of Euphorbia connata collected from the kerman , afforded a number of new microcyclic diterpenes from decipinone and jatrophane-B type groups.
Conclusions: Jatrophan-B type diterpenes are very rare in nature and it is the first time they are reported in euphorbia genus. Therefore, this plant could be considered as a new source of this chemotype.

Keywords: *Euphorboa connata*; Diterpenoids; NMR spectra