

Abstract

Antiproliferative Effect of Methanolic Extract of *Linum arboreum* on A549 Cells [†]

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Abstract: Many anticancer drugs in clinical use are natural product derived from natural sources. Today, investigations of anti cancer effect of different natural products are increase. The aimed of the current study was to investigate possible antiproliferative effects of methanolic extract of *Linum arboreum* leaves (MELAL) and fruits (MELAF). *Linum arboreum* is a plant species that member of Linaceae family. We evaluated the antiproliferative effect of MELAL and MELAF on human lung carcinomacells A549 by XTT assay. Cells exposed different concentration of MELAL and MELAF (0.1–2000 µg/mL) for 24 h. IC₅₀ value was determined 0.771 ± 0.043 µg/mL of MELAL and IC₅₀ value was determined 1.456 ± 0.995 µg/mL of MELAF. MELAL has shown higher antiproliferative activity compare with MELAF. Also both of MELAL and MELAF have higher antiproliferative activity with low IC₅₀ values in compared cisplatin. Especially MELAL has shown strong anticancer activity with low IC₅₀ value. Nevertheless, anti cancer activity of MELAL should be supported by further studies.

Keywords: *Linum arboreum*; XTT; A549



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