

2nd International Conference and Exhibition on

MARINE DRUGS AND NATURAL PRODUCTS

June 15-17, 2017 London, UK

Cytotoxicity of *Asphodelus aestivus* against two human cancer cell lines

Afaf Al Groshi, Luffun Nahar, Andrew Evans, Abdurazag Auzi, Satyajit D Sarker and Fyaz M D Ismail
UK

n-Hexane, dichloromethane and MeOH extracts of the leaves and tubers of *Asphodelus aestivus* were screened for their cytotoxicity against two human cancer cell lines, namely, lung (A549) and prostate (PC3) using the *in vitro* MTT assay. Significant cytotoxicity was observed with *A. aestivus* tubers against both cell lines, whereas, the dichloromethane extract of *A. aestivus* leaves showed activity only against the lung (A549) cell lines with the IC₅₀ value of 90 µg/mL. The *n*-hexane and the dichloromethane extracts of tubers exhibited relatively high level of cytotoxicity against the prostate cancer cells (PC3) with the IC₅₀ values of 80 and 19 µg/mL, respectively. The dichloromethane extract of the tubers also showed considerable cytotoxicity against the lung (A549) cancer cells (IC₅₀ value of 16 µg/mL). The selectivity index (SI) for *A. aestivus* tubers was also determined using the human normal prostate cell line (PNT2). The tubers revealed high degree of cytotoxic selectivity on prostate cancer cells (SI=26).

Biography

Afaf Al Groshi has her expertise in pharmacognosy, phytochemistry, natural products and *in vitro* cytotoxicity study. She has built this work after years of experience in research, evaluation, teaching and administration in education institutions.

afaf.gerushi@gmail.com

Notes: