

## عنوان مقاله:

.Antioxidant, photoprotective, cytotoxic, and antimicrobial activities of *Albuca amoena* Batt

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## خلاصه مقاله:

**Introduction:** *Albuca amoena* Batt. is an endemic plant from Morocco used for treating melanoma or leishmaniasis. The aim of this study is to test the antioxidant, photoprotective, cytotoxic, and antimicrobial properties of this plant. **Methods:** The extracts of the aerial and bulbous parts were obtained by hydroalcoholic maceration of the plant. Their antioxidant potentials were evaluated in vitro using four methods of ۲,۲-diphenyl-۱-picrylhydrazil (DPPH), ۲,۲'-azinobis-(۳-ethylbenzothiazoline-۶-sulfonic acid) (ABTS), ferric reducing antioxidant power (FRAP) assay, and total antioxidant capacity assay (TAC). The photoprotective properties were evaluated through the study of UVA and UVB absorbance and antityrosinase activity. The cytotoxic activity was determined against two breast cancer cell lines (MCF-۷ and MDA-MB-۲۳۱) and one human colorectal cancer cell line (HT-۲۹) using the ۳-[۴,۵-Dimethylthiazol-۲-yl]-۲,۵ diphenyl tetrazolium bromide (MTT) method. In addition, the antimicrobial activity was tested on six pathogens: *Pseudomonas aeruginosa*, *Escherichia coli*, *Klebsiella pneumoniae*, *Proteus mirabilis*, *Staphylococcus aureus*, and *Candida albicans* by using the disc diffusion method. **Results:** The results showed that the UVA and UVB absorptive properties of the extracts were similar to those used as positive controls: Methyl salicylate and zinc oxide. Moreover, the antioxidant and antityrosinase properties of the studied extracts were found to be weakly active. The extracts had strong cytotoxicity activities, especially against HT-۲۹ cell line. However, the extracts did not show any antibacterial activity. **Conclusion:** According to the results of this study, the extracts can be used as a sunscreen to avoid dermal anomalies and as a new source of cytotoxic bioactive compound.

## کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

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