

Proceedings of the SPEHES-ANTALYA – INT’L CONFERENCE
24-25 JUNE 2016 – AKDENIZ UNIVERSITY – ANTALYA, TURKEY

**SCIENTIFIC PROOF FOR THE TREATMENT OF CANCER BY
NATURAL PRODUCTS; THE IMPORTANT and COMMON
SPECIMENS FROM TURKEY**

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ABSTRACT

Cancer, is one of the discouraging diseases which make threats human life in our current world. Many searches have been made and are still made, aiming at the etiology and treatment of this deadly disease on life which is also known as abnormal cell proliferation in the organism. That is why, most part of the studies carried out on bioactive plants have been focused on cancer treatment. In recent years, traditional medical practices have become a topic which gains universal importance. Wide interest in “green treatment” and the success of antitumorigenic pharmaceuticals of vegetable origin like taxol, etoposide, vincristine and topotecan designate that this inclination will continue.

At the same time, overexploitation of the biosphere means that many plant species are becoming extinct. Deforestation is continuing at an alarming pace and we need to work fast to investigate the areas of high biological diversity before it is too late. Thus strategies need to be developed efficiently exploit the vegetable resources available to us. One way is to combine the rapid chemical and biological screening of plant extracts. Recently, the development of new *in vitro* approaches for cell culturing and assessment of cellular functions greatly facilitates the screening of natural sources for active constituents and investigations on their mechanism of action. The wide use of such systems may help in reducing animal experiments and in increasing our knowledge about the characteristics, potency, and efficiency of natural products.

In light of the significant biological activity and our screening studies, our team has decided to focus on *Alkanna*, seaweeds, rosemary, blueberry, microalgae, black carrot extracts [1, 2, 3, 4, 5, 6].

The obtained extracts alone or in combination with the anticancer drugs may offer a good strategy for the treatment of a variety of human cancers that are resistant to chemotherapy. In light of the findings of these studies, an important step has been taken as far as preparation of biologically obtained, cheap chemotherapeutics to be used in treatment of some cancer types.

It is hoped that the results of this study will contribute not only to improve the life quality and navigation of the disease but also the economy of the country by decreasing the consumption

of imported therapeutic medicine that is applied to cancer patients and will support chemotherapeutic and radiotherapeutic treatment effectiveness.

Keywords: *Alkanna, anticancer effect, cancer cells, natural products.*

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