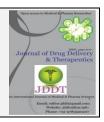


Available online on 15.07.2019 at http://jddtonline.info

## **Journal of Drug Delivery and Therapeutics**

Open Access to Pharmaceutical and Medical Research

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Research Article

## Anticancer and Cytotoxic Potential of Aqueous Extract of *Triticum aestivum* on Colorectal Carcinoma

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## **ABSTRACT**

Introduction: Cancer is caused by abnormalities in genetic material of the transformed cells. Cancer may also be initiated by carcinogens, tobacco, smoke, radiation, chemicals or infectious agents, especially some viruses. Cancers cause annually more than 13% of all human deaths. More than 70% of all cancer deaths occurred in low and middle income countries. Deaths from cancer worldwide are projected to continue rising, with an estimated 12 million deaths in 2030 (WHO estimate). Natural products have been used as traditional medicines in many parts of the world like Egypt, China, Greece, and India from ancient times. It is from these medicinal plants, the modern drugs been developed known to be free of the deleterious effects, are inexpensive and effective. One of these herbs is Wheatgrass, the young grass of *Triticum aestivum Linn.*, family: Poeaceae. Objectives: Objective of the study was to analyze anticancer property of leaves of *Triticum aestivum* on HCT-15 cells. Materials and methods: The young grass of *Triticum aestivum* is was collected. The aqueous extract was prepared by using standard protocols. The antiproliferative effect of the aqueous extract was evaluated *in vitro* by employing MTT assay. The potency of plant extract was calculated in terms of percent decrease in viable HCT-15 cells as compared to the control. Result and conclusion: The extract showed dose dependent antitumor activity. The MTT assay showed an anti proliferative activity (IC50) at 258.8 µg/ml of crude extract.

Keywords: Triticum aestivum, CRC, HCT-15, IC50, MTT Assay.