The Effect of Gilaburu (Viburnum opulus) Juice on Ehrlich Ascites Tumor (EAT) Cell Culture †

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Abstract: Cancer is a significant public health problem in both developed and developing countries. Phytotherapy studies have gained importance due to the side effect of standard cancer therapy protocols. Viburnum opulus, belongs to the Caprifoliaceae family, is used in the treatment of various diseases. Anticarcinogenic effects of Viburnum opulus have also been reported. The aim of this study is to compare the cytotoxic effect of Gilaburu juice extract given at various doses against EAT cell in culture. The juice of the fermented Gilaburu fruit were centrifuged filtered through a 50 kDa filter and the fraction below 50 kDa was lyophilized. The EAT cells in the ascitic fluid from the previously prepared stock animal were counted and plated on 96 well plates. The first group of five was determined as the control group and the other groups were given 50–100–200 μg/mL Gilaburu extract. At the end of 3, 24 and 48 h cultured periods, the cells were counted and the number of viable and dead cells was noted. The number of dead and alive cells in control and experimental groups did not change after 3 hours period but there were 50% dead cells in experimental groups after 24 h culture period.

Keywords: cancer; Viburnum; EAT cell