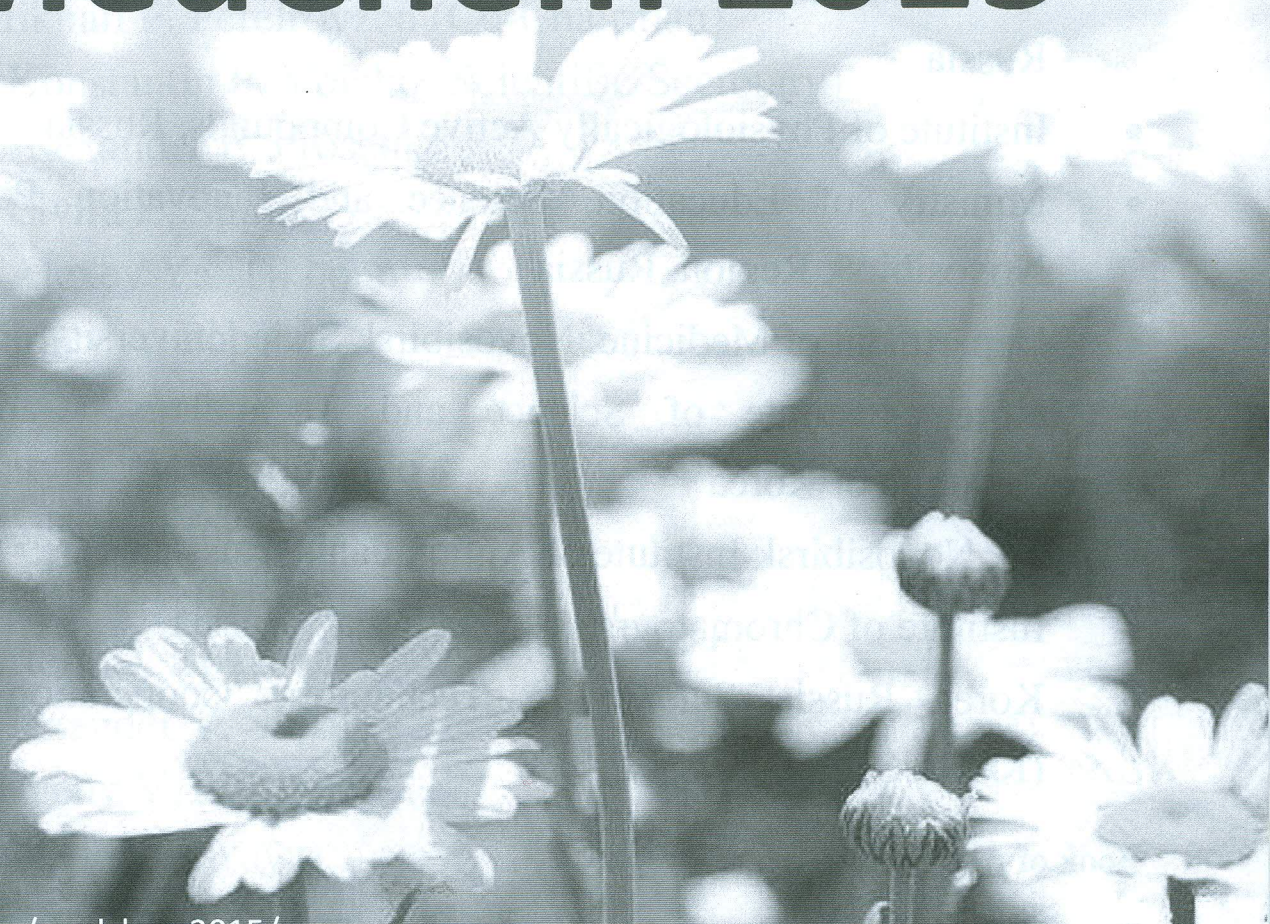


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Influence of Pectins Isolated from Different Raw Materials on Blood Parameters of Rats

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Pectin, being a unique biologically active product, possessing functional properties, presents special interest. According to the literature data pectin effects on some parameters of immunity, specifically T-lymphocytes and phagocytic activity of neutrophils [1, 2]. It was shown the pectin with low molecular mass and high esterification degree improves bioavailability of iron from iron sulfate [3, 4].

The objective of our investigations is to study the influence of pectins isolated from amaranth, daikon, apple pomace [5] as well apple and citrus pectins supplied by "Herbstreith & Fox" Company Group (Neuenbuerg, Germany) on morphological and immunological parameters of rats blood. Investigated pectins had been adding to drinking water of experimental rats in the doses 60-140 mg/kg for 7-12 weeks. The blood parameters were measured by methods of optical microscopy and spectrophotometry.

It was established that all investigated pectins effect predominantly on the immunological parameters of blood. The leucocytes level increased as well leukogram normalized under pectin treatment. Thus, the quantity of medullocll cells and young forms of granulocytes as well large lymphocytes decreased. At the same time, the quantity of mature immune cells increased. Moreover, the phagocytic activity of neutrophil to *Escherichia coli* and *Staphylococcus aureus* improved specifically the number of englobed neutrophil in the groups of rats treated with pectins. The effect of pectins on the level of hemoglobin and erythrocytes manifested less specifically in the increase of the erythrocytes number.

Therefore, the study revealed the positive influence of pectins on the investigated parameters of the rats blood.

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