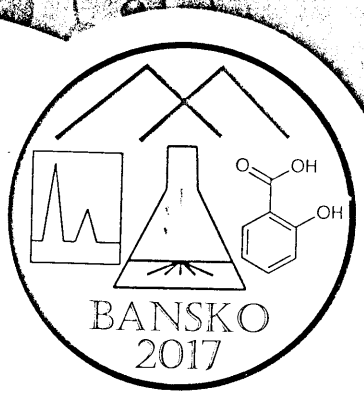
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ARONIA MELANOCARPA AFFECTS AGE-RELATED TISSUE REMODELING IN RAT THYMUS

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Progressive thymic involution, which is a sign of aging, leads to a loss of immune function, increased susceptibility to infections, risk of autoimmune diseases and neoplasms in adults. The use of antioxidants is a potential therapeutic approach for decelerating the aging of immune system. The aim of this study was to examine the effect of *Aronia melanocarpa* juice on age-related tissue remodelling of thymus in mature rats. A model of spontaneous aging rats supplemented with antioxidant beverage for 12 weeks was used. The thymuses were examined histologically using Azan and Methylene blue staining methods and morphometric analysis was applied. The number of mast cells and amount of connective tissue in the interlobular septa were evaluated. *Aronia* juice supplementation resulted in distinctive preservation of the thymic lobules structure. The morphometric analysis showed a significant decrease in the number of mast cells and reduction of the relative quantity of connective tissue in the interlobular septa.

Therefore, it could be concluded that *Aronia melanocarpa* affects beneficially age-related tissue remodelling in thymus.

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