# ANTI-INFLAMMATORY EFFECT OF LEDUM PALUSTRE

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**Introduction.** Upper respiratory tract accompanied by coughing and inflammation. Drug needed for treatment should be effective, safe, combine the complex pharmacological activities.

**Aim.** To find and explore extract, which has not only antitussive effect, but also anti-inflammatory. Therefore, we decided to investigate the anti-inflammatory effects of conventional Ledum palustre: a complex with arginine, purified extract Ledum palustre using ethyl acetate and polysaccharide complex Ledum palustre.

**Materials and methods.** Study of anti-inflammatory activity of extracts obtained from conventional Ledum palustre by edema induced by carragenin in rats.

The method is based on an assessment of the acute exudative inflammation. Acute inflammation (swelling) reproduce the introduction for plantar of 0.1 ml 1% solution of carragenin. The initial volumes of the paw experimental animals were measured by onkometr before the start of experiment. Investigated probe extracts were injected into the stomach 1 hour before administration of carragenin. The volumes of the paw experimental animals were re-measured by onkometr after an hour post entering carragenin. Anti-inflammatory response was assessed every hour for 4 hours after induction of inflammation. We used saline-drug as a control and diclofenac sodium as referent-drug, the "gold standard" of anti-inflammatory therapy.

**Results and discussion.** The study confirmed the anti-inflammatory effect Ledum palustre. Polysaccharide complex Ledum palustre demonstrated anti-inflammatory activity in a dose of 50 mg / kg. Edema decreased by 84% compared with the control. Other complexes showed lower activity.

**Conclusions.** Study of anti-inflammatory activity of extracts Swamp conventional yielded positive results, allowing to expand the range of normal usage Swamp, potentiation of pharmacological effects. Anti-inflammatory effect will reduce inflammation in the respiratory organs. The combination of anti-inflammatory and antitussive effect provide complex effects on the respiratory tract and provide greater therapeutic efficacy.