

## SOME MEDICINAL SUBSTANCE INFLUENCE ON *RUMEN* PROTOZOA, GAS FORMATION AND FOAM SUPPRESSION *IN VITRO*

Ieva Pakštytė, Algimantas Matusevičius

*Lietuvos veterinarijos akademija, Tilžės g. 18, LT – 3022 Kaunas; tel.8 37 36 30 41*

**Summary.** From the literature sources it's known, that bloat accounts for 40% of all nutritional diseases and ailments. Because the reasons and mechanism of bloat development aren't know'n very well, according to the literature sources we try to know more about bloat ethiology and pathogenesis. Studying literature we have found these reasons of bloat - there is a genetic component to bloat, forage, it's amount, sort and biochemistry, environmental influence on forage quality, rumen microbe population, cattle physiological condition. When cattle have bloat, physical, biological and chemical parametres change in *rumen*, physiological – biochemical processes develop in all cattle organism. Also we have analised ethanol, benzalkonium chloride, chlorhexidine, polymethylsiloxan, preparats Heksalkoni and TH-4 influence on cattle *rumen* protozoa, gas formation and foam suppression *in vitro*. Benzalkonium chloride suppressed gas formation best of all. Other substances as chlorhexidin, Heksalkoni suppressed gas formation less than benzalkonium chloride. Polymethylsiloxan had no influence on *rumen* protozoa, but suppressed the foam best of all. Other substances, which were researched had influence on *rumen* protozoa and suppressed the foam less than polymethylsiloxan.

**Keywords:** rumen, rumen protozoa, ethanol, benzalkonium chloride, chlorhexidine, polymethylsiloxan, Heksalkoni, TH-4, foam, gas.