

## CORRELATION BETWEEN DIFFERENT SEXUAL CYCLE STAGES AND VAGINAL BACTERIAL FLORA IN BITCHES OF DIFFERENT BREEDS

Saulius Aidas Laurusevičius, Jūratė Šiugždaitė, Henrikas Žilinskas  
*Lithuanian Veterinary Academy, Tilžės st. 18, LT-47181, Kaunas, Lithuania*  
*Tel. (+370 37) 36 34 90, e-mail: sac@lva.lt*

**Summary.** This study determined the correlation between bacterial vaginal flora and the different sexual cycle (prooestrus, oestrus, metoestrus and anoestrus) of bitches of seven different breeds over 18 month period. Vaginal swab samples were taken from the vagina of 46 bitches of the following breeds: English bulldogs (10), Dobermans (6), Collie (9), Great Danes (6), German shepherds (5), Labrador retrievers (5) and Scottish terrier (5). The most common bacterial species isolated from 46 investigated bitches of different breeds were *Staphylococcus* spp. (57.6%) and *Staphylococcus aureus* was isolated from 32.6% of samples. In addition, *Escherichia coli* (in 15.1% of samples), *Streptococcus* spp. (9.1%), *Staphylococcus* spp. *Pasteurella* spp. (15.1%), *Pseudomonas aeruginosa* (3.1%) were identified. Our results were in concert with previous findings, that the lowest distribution of vaginal bacteria was found during metoestrus (2.0%) and significantly higher number of bacteria were identified during oestrus - 12.2% ( $P<0.05$ ) and prooestrus - 28.6% ( $P<0.001$ ). Our results showed that bacteria growth at different stages of the sexual cycles was variable and the vaginal flora had mixed character.

**Key words:** bitch, vaginal microflora, reproductive cycle.