

VARIABILITY OF THE MAMMALIAN *OS PENIS* – PHYLOGENESIS AND ECOLOGY

Summary

The penis bone (also called as *baculum* or *os penis*) is a heterotopic bone occurring in such orders like: carnivores, bats, insectivores, rodents and some primates. *Baculum* is extremely morphologically diverse both in shape and size, even between closely related species. Hence it has been widely used as a systematic tool. Consequently, *os penis* serves different functions across the species: e.g. stimulation of reproductive track, mechanical support, protection of the urethra from compression. Some analysis suggest also, that hooked tip of the penis bone can be

used to damage and remove sperm which comes from the previous male. It can be also used as an indicator of genetic quality in males because it continues growth throughout life. Numerous researches into *baculum* provide some information about animal evolution, sexual selection and reproductive strategies in the different groups of animal. However, our knowledge about evolution, significance and environmental influence on the *os penis* seems to be incomplete and needs to be further studied.