

THE EFFECT OF THE ESTROGENIC MYCOTOXIN ZEARALENONE ON BOAR REPRODUCTIVE POTENCIAL AND THE DYNAMIC OF ASPARTATE AMINOTRANSFERASE AND ALANINE AMINOTRANSFERASE LEVELS IN THE BOAR BLOOD SERUM

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Summary. This study was carried out to assess the impact of the feedstuff contaminated with mycotoxin zearalenone on boar sperm quality, testicle tissues and the amounts change of enzymes aspartate aminotransferase (AST) and alanine aminotransferase (ALT).

The boars were fed with feedstuff naturally contaminated with mycotoxin zearalenone (1 ppm) for two months period, no testicle changes or negative impact on their sperm quality was observed. Prominently higher levels (by 7.45 ± 2.86 TV/L) of the enzyme alanine aminotransferase (ALT) were observed in the blood serum of experimental boars ($p \leq 0.001$). The results showed that zearalenone at amounts 1ppm in field exposures for two months did not negatively affect the reproductive potential of mature boars yet it stimulates liver metabolic processes.

Key words: zearalenone, boar, semen quality, aspartate aminotransferase, alanine aminotransferase.