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## The influence of different inorganic phosphorus sources in broilers diet on production results and bone mineralization

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The aim of this trial was to determine the influence of monobasic calcium phosphate (MCP), as source of inorganic phosphorus, on production results of broilers, but also to determine the bone breaking strength, which indicates the level of availability of phosphorus from mineral nutrients. The trial included 200 broilers (Cobb 500), both sexes, from the same hatch. Broilers were divided in two groups, 100 each. During the 42 experimental days, which was divided in three phases (1-21, 21-35 and 35-42 days), groups were fed with different experimental diets. One group of broilers was fed with diet supplemented with MCP, provided by "Elixir Group" D.O.O., Sabac, Serbia. The other group was fed with diets supplemented with MCP originating from Russia. During the trial, health status and mortality were monitored on daily basis. Production results (average body weight, average daily gain, feed intake and feed to gain ratio) were monitored during the trial. At the end of the trial, 6 broilers from each group were slaughtered and the tibiae bone was examined on breaking strength. Production results of the first experimental group (fed with addition of MCP-Elixir), were significantly better, compared to the group fed with MCP from Russia ( $p < 0.05$ ). Bone breaking strength in the same group was higher but without statistical significance ( $p > 0.05$ ). The results of the experiment indicated that MCP as inorganic phosphorus source and has significant impact on growth, production performances, but also on level of mineralization of bones.

### Biography

Dragan Sefer has completed his PhD in 2002 at the Faculty of Veterinary Medicine, Department of Nutrition and Botany of Belgrade University, Serbia. He became Head of the Department in 2007 and since 2014 he has been engaged as a Full Professor. He has published more than 150 papers in National and International journals (more than 10 in reputed journals) and two books (*General Nutrition and Feed Safety for Animals*) intended for the students at the Faculty of Veterinary Medicine.

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