

## EFFECTS OF ENZYMES, ORGANIC ACIDS MIXTURE AND PREBIOTICS ON PRODUCTIVITY OF BROILER CHICKENS AND SENSORY ATTRIBUTES OF THE MEAT

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**Summary.** The effect of addition of enzymes *Rovabio*<sup>TM</sup>*Excel AP*, organic acids *Euroguard SVB* and prebiotics *Agrimoss*<sup>®</sup> to the feed on broiler chickens growth dynamics, feed conversion ratio, mortality and sensory properties of the meat was investigated experimentally. The number of 800 broiler chickens were divided into 4 groups: Group 1 – basal diet (control), Group 2 – basal diet supplemented with enzymes *Rovabio*<sup>TM</sup>*Excel AP*, Group 3 – basal diet supplemented with enzymes *Rovabio*<sup>TM</sup>*Excel AP* + organic acids mixture *Euroguard SVB*, Group 4 – basal diet supplemented with enzymes *Rovabio*<sup>TM</sup>*Excel* + prebiotics *Agrimoss*<sup>®</sup>. The results showed that in Groups 2 and 3 body weight of broiler chickens increased on 2% and feed conversion decreased on 6%, compared to Group 1. Addition of *Rovabio*<sup>TM</sup>*Excel AP* or prebiotics *Agrimoss*<sup>®</sup> to the diet in Group 4 increased broiler chickens body weight on 4% (P<0.05) and feed conversion ratio decreased on 6%, compared to controls in Group 1. It was estimated that addition of enzymes and its combination with organic acids and prebiotics had no significant effect on the sensory properties (odor, colour, texture, taste and aftertaste) of broiler chickens drumsticks (P>0.05). The addition of combination *Rovabio*<sup>TM</sup>*Excel AP* + *EuroGuard SVB* or *Rovabio*<sup>TM</sup>*Excel AP* + *Agrimoss*<sup>®</sup> statistically significantly increased broiler chickens breast hardness and fibriness (P<0.001).

**Key words:** broiler chickens, enzymes, organic acids, prebiotics, growth performance, meat sensory properties.