

## INFLUENCE OF GRADED LEVELS OF RAPE SEED IN THE DIETS OF COMMERCIAL BROWN LAYERS ON EGG QUALITY

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**Summary.** The experiment was performed on eggs laid by Lohmann Brown laying hens fed diets without rape seed (I) or with 7.5 % (II), 15.0 % (III), 22.5 % (IV) and 30.0 % (V) of chemical and hydro-thermal treated rape seed. From 27<sup>th</sup> to 62<sup>nd</sup> weeks of age, at four-week intervals, 36 eggs were selected randomly to determine the concentrations of fatty acids in the yolk. An increase in the levels of both rape seed and rape seed oil in the experimental diets resulted in an increase in the content of n-6 and n-3 fatty acids, as well as in the narrowing of the n-6 : n-3 ratio.

**Key words:** laying hens, rape seed, egg quality, fatty acid profile, n-3 fatty acids