

## Economical Evaluation of Organic and Conventional Farming Systems in 2004 and 2006

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### Abstract

*The aim of this study was to identify the effectiveness of plant production in six field crop rotations using the organic and conventional systems in the years 2004 and 2006. The field experiment was based on degraded Chernozem on loess (Luvi – haplic Chernozem) in a maize and barley-growing region in southwestern Slovakia (near Piešťany). The economical evaluation was based on assembling and evaluating the data about invested variable costs, reached incomes, and the gross margin. Gross margin data was calculated as the difference between the market price of the main product and true variable costs. Variable costs increased by about 13.6% in the conventional system and about 11.6% in the organic system between these years. There were lower costs in the organic system compared with the conventional system for all crops. There was not a positive gross margin for the winter wheat growing after the spring barley using the conventional farming system and also in the organic farming system (except during 2006) due to the lower yields and bought farmyard manure. Spring barley after maize for grain was the crop that reached the highest values of gross margin in both farming systems. The gross margin attained in the organic farming system was higher by 15% compared with that of the conventional system (identical price for production), and if we used the price model with the so-called premium price for organic production (20% higher than conventional market prices) the gross margin in the organic system was higher by almost 99.6%.*

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