

EVALUATION OF LOCAL PULSES NUTRITION VALUE AND POTENTIAL FOR PIGS FEED

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Pulses are a high quality source of protein and energy for all forms of livestock, combining high levels of palatability and digestibility and have become an increasingly popular in recent years. Peas are the preferred pulse in pig and poultry diets, followed by faba beans and lupins. Levels of all nutrients can vary depending on the variety, location and growing conditions. Therefore the aim of investigation was to compare biochemical composition of field peas, faba beans and lupins varieties grown in Latvia and evaluate their potential in pig feed. The three year study was performed, research object were field peas varieties '*Almara*' and '*Selga*', faba beans varieties '*Fuego*', '*Olga*', '*Granit*', '*Lielplatone*', '*Olga*', '*Reda DS*', '*Jogeva*' and lupins varieties '*Boruta*', '*Boregina*', '*Probor*' and '*Sonet*'. In the studied samples, content of protein, fat, ash, fibre, composition of amino acids were determined and metabolizable energy were calculated. The evaluated richest pulses with protein were lupins and field peas, protein content determined from them are 30.2 to 36.7% and from 27.3 to 32.2%, respectively. Content of essential amino acids in the field peas and lupins were not differed significantly. The richest with lysine were faba beans 6.0 to 6.7 mg 100g⁻¹. We concluded that all pulses provide equilibrium high metabolizable energy for pigs from 13.2 to 14.6 MJkg⁻¹ but there is significant difference among years.

Biography

Vita Sterna has completed her PhD from Latvia University of Agriculture in 2005. She is the leader researcher of Institute of Agresources and Economy, department of Agro-ecology from 2013, performer of projects of Research institute of Biotechnology and Veterinary medicine "Siga" of Latvia University of Agriculture 2005-2013. She has published more than 35 papers in reputed journals, including 11 of them incorporated in the Web of science data base and she has been serving as an editorial board member of repute. 2013 to date Expert of Latvia Council of Science – Food science – milk, meat, eggs, grain composition and technological processes.

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