**58th Annual Meeting of the European Association for Animal Production (EAAP)**
Dublin - Ireland, August 26th – 29th 2007
Session 33. Open session - Ruminal Nutrition
Theatre presentation
Abstract number 1167
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# *In sacco* degradability of crude protein in lupine and soybean

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**Abstract**

In this study, nutritive value of three varieties of white lupine *(Lupinus albus)* Amiga, Butan, Dieta and two varieties of blue lupine *(Lupinus angustifolius)* Prima, APR82 were compared with soybean Korada. Chemical compositions were determined according AOAC.

The nitrogen degradability experiments were performed using *in sacco* method in three dry cows (Black Pied) equipped with large ruminal cannulas (120 mm internal diameter). The cows were fed twice a day (at 6 a.m. and 4 p.m.) and their daily rations consisted of 4 kg alfalfa hay, 10 kg maize silage and 1 kg barley meal with a vitamin and mineral supplement. The nylon bags (pore size 42 μm - Uhelon 130 T, Silk & Progress Moravská Chrastová) containing feed samples were attached to a cylindrical carrier. Protein effective rumen degradabilities (rumen outflow rate 6 %.$h^{-1}$) were determined in Amiga 76 %, Butan 73 %, Dieta 73 %, Prima 71 %, APR82 79 % and Korada 83 %. The significant differences were declared among soybean Korada and lupine Butan, Dieta and Prima. In lupine, there were significant differences between Prima and APR82.

Keywords:
in sacco degradability, intestinal digestibility, ruminants, crude protein, lupine, soybean

**ACKNOWLEDGEMENTS**

This research was supported by the Ministry of Agriculture of the Czech Republic (MZE 0002701403 and NAZV, project No. QG60142).