T159 Chemical composition of canola meal, 00-rapeseed meal, and 00-rapeseed expellers. T. Maison* and H. H. Stein, *University of Illinois, Urbana.*

The objective of this work was to compare the chemical composition of canola meal, 00-rapeseed meal, and 00-rapeseed expellers. Eleven samples of canola meal were collected from crushing plants in North America, and 10 samples of 00-rapeseed meal and 5 samples of 00-rapeseed expellers were collected from crushing plants in Europe. All samples were analyzed for GE, DM, CP, AA, ash, acid hydrolyzed

ether extract (AEE), crude fiber, ADF, NDF, ADL, glucose, fructose, maltose, sucrose, raffinose, stachyose, verbascose, starch, Ca, K, Mg, Na, P, S, Co, Cr, Cu, Fe, Mn, Mo, Se, Zn, phytic acid, and glucosinolates. Concentrations of these components in canola meals were compared with those in 00-rapeseed meals, and 00-rapeseed meals were compared with 00-rapeseed expellers. Results indicated that concentrations of sucrose, P, K, Zn, and glucosinolates are greater ($P < 0.05$) in 00-rapeseed meal than in canola meal. Concentrations of GE and AEE are greater ($P < 0.05$) in 00-rapeseed expellers than in 00-rapeseed meal, but concentrations of CP, Thr, ash, sucrose, crude fiber, NDF, ADL, Ca, K, Mg, P, S, and Mo, are greater ($P < 0.05$) in 00-rapeseed meal than in 00-rapeseed expellers. For canola meal, concentrations of CP, Ca, Fe, and Mn are greater than values published by NRC (1998), but concentrations of most other nutrients in canola meal are in good agreement with NRC (1998) values. In conclusion, the concentration of glucosinolates is much less in canola meal than in 00-rapeseed meal, and concentrations of AEE and GE are greater in 00-rapeseed expellers than in 00-rapeseed meal. However, concentrations of most other nutrients are greater in 00-rapeseed mal than in 00-rapeseed expellers.

Table 1. Composition of canola meal (CM), 00-rapeseed meal (RSM), and 00 rapeseed expellers (RSE), DM-basis

Item	CM	RSM	RSE
GE,[1] kcal/kg	4,708	4,734	5,143
CP,[2] %	41.4	40.7	38.8
Fat,[1] %	4.3	4.1	12.6
NDF,[2] %	33.6	33.8	27.0
Ash,[2] %	7.9	7.8	6.8
Glucosinolates[3], μmol/g	3.6	11.3	14.5

[1]00-rapeseed expellers greater than 00-rapeseed meal ($P < 0.05$).
[2]00-rapeseed meal greater than 00-rapeseed expellers ($P < 0.05$).
[3]Canola meal greater than 00-rapeseed meal ($P < 0.05$).

Key Words: canola meal, composition, rapeseed meal