P078 **Inclusion of fermented soybean meal, chicken meal, or poultry by-product meal in phase 1, phase 2, and phase 3 diets fed to weanling pigs.** O. J. Rojas Martinez*, H. H. Stein, *Animal Sciences, University of Illinois , Urbana.*

Three experiments were conducted to test the hypothesis that fermented soybean meal (FSBM), chicken meal (CM), or poultry by-product meal (PBM) can replace fish meal (FM) in diets fed to weanling pigs during the initial 28 d post-weaning. In all experiments, newly weaned pigs (21 d) were randomly allotted to a randomized complete block design. In Exp 1, 192 pigs (initial BW: 6.88 ± 2.48 kg) were allotted to 4 dietary treatments with 2 phases. In phase 1, a positive control diet contained FM, whey powder (WP), and protein plasma (PP). A negative control diet (without animal protein) and 2 additional diets in which FSBM replaced FM or FM and PP were also formulated. In phase 2 diets, a positive control, a negative control diet, and 2 diets in which FSBM replaced FM or FM and WP were formulated. In Exp 2, 175 pigs (initial BW: 6.86 ± 2.86 kg) were allotted to 5 dietary treatments with 3 phases. The positive control diet contained FM, WP, and PP in phase 1 and 2, and FM and WP in phase 3, but no animal ingredients were included in the negative control diets. Three additional diets were formulated within each phase in which FSBM replaced FM, FM and PP, or FM, PP, and WP. In Exp. 3, 175 pigs (initial BW: 6.97 ± 2.1 kg) were allotted to 5 dietary treatments with 3 phases. The positive control diets contained FM, whereas no FM was included in the negative control diets. Three additional diets were formulated within each phase in which FM was replaced by CM, PBM, or FSBM. The final BW of the pigs in each experiment was not different among treatments. Likewise, the G:F ratio for the overall experiment were not different among treatments in Exp. 1 and Exp. 2. However, in Exp. 3, G:F was greater for pigs fed the positive control diets than for pigs on the other treatments, but it was not different among pigs fed CM, PBM, and FSBM. In conclusion, FSBM may replace FM, CM, and PBM in diets fed to pigs during the initial 28 d post-weaning without affecting pig growth performance except that G:F may be reduced.

Key Words: Fermented soybean meal, chicken meal, poultry by-product meal, pigs